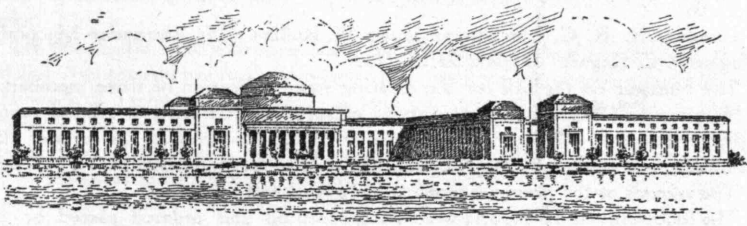


COLEMAN DU PONT, '84
President of the Alumni Association

technology review

Published by MIT

This PDF is for your personal, non-commercial use only.
Distribution and use of this material are governed by copyright law.
For non-personal use, or to order multiple copies please email
permissions@technologyreview.com.



The Technology Review

Published at Cambridge "A" Branch, Boston, Mass.

ROBERT E. ROGERS, *Editor*, Massachusetts Institute of Technology, Cambridge, Mass.

VOL. XXI

JULY, 1919

No. 3

THE ANNUAL COUNCIL MEETING

General Coleman du Pont, '84, the new president — reports of splendid activity during a discouraging year — the promise of the future

THE seventieth and Annual Meeting of the Alumni Council was held at the Engineers' Club, Boston, Monday, May 26, 1919. The usual informal dinner was served at 6.30 P.M., with an attendance of forty-one. Maj. Alexander Macomber, '07, just back from overseas service, was salad orator. The meeting was called to order at 7.45 by President Morss, with an attendance of fifty-three, as follows:

President (retiring), Henry A. Morss, '93; president-elect, Coleman du Pont, '84; secretary-treasurer, Walter Humphreys, '97.

Executive Committee: Orville B. Denison, '11; Charles R. Main, '09; Carl W. Gram, '09; Kenneth Moller, '07.

Ex-presidents: Frederic H. Fay, '93; Henry J. Horn, '88; Francis R. Hart, '89.

Representatives-at-large: Z. W. Bliss, '89; S. G. H. Fitch, '00; C. W. Aiken, '91; Bradley Dewey, '09; Russell Robb, '88.

Class representatives: '68, R. H. Richards; '72, C. Frank Allen; '75, Thomas Hibbard; '76, Charles T. Main; '83, Horace B. Gale; '84, Harry W. Tyler; '85, Arthur D. Little; '95, H. K. Barrows; '96, J. A. Rockwell; '97, Charles Bradlee; '98, S. K. Humphrey; '00, Ingersoll Bowditch; '01, Robert L. Williams; '02, F. H. Hunter; '04, M. L. Emerson.

Representatives of local associations: H. N. Dawes, '93; Charles W. Eaton, '85; Everett Morss, '85; R. A. Hale, '77; John C. Chase, '74; Walter D. Davol, '06; Charles F. Lawton, '77; A. D. Maclachlan, '96; Frank L. Pierce, '89; Charles M. Spofford,

'93; George E. Russell, '00; B. G. Philbrick, '02; A. G. Robbins, '86; Frederic W. Fuller, '96.

Guests: Dr. R. C. Maclaurin; James W. Rollins, '78; Alexander Macomber, Professor R. E. Rogers, '07; Mr. Scully, '15.

The business on the call for the meeting was: "Election of three members to the Nominating Committee, appointment of standing committees, annual reports of officers and committees, proposed change in By-Laws concerning the term of office of president and new administration, consideration of further report on "The Tech."

The records of the previous meeting were read and approved.

The following annual reports were read, accepted and ordered placed on file: Report of the Secretary-Treasurer, Report of the Auditors, Report of the Committee on Permanent Funds, Report of the Alumni Fund Committee of 1912, Report of the Runkle Memorial Committee, Report of the Massachusetts Institute of Technology Committee on National Service.

It was VOTED: That it is the sense of the Council that Mr. Gibbs, upon his return from the Technology Bureau in Paris, should receive \$1000 from the War Funds, as a present of appreciation.

Reports were read, accepted and ordered placed on file: Athletics, Budget and Finance, Tech Show, Musical Clubs.

The Council balloted for members on the Nominating Committee for three years, and the following were elected: Henry A. Morss, '93; Frank L. Locke, '86; Orville B. Denison, '11.

The Nominating Committee nominated members for the standing committees, and by vote the following were declared elected:

To the Committee on Assemblies: W. R. Mattson, '13, until 1924.

To the Committee on Permanent Funds: R. H. Richards, '68, until 1922.

To the Committee on Publication of the TECHNOLOGY REVIEW: Wilfred Bancroft, '97, until 1923 (replacing D. G. Robbins, resigned); Arthur T. Hopkins, '97, until 1924.

To the Committee on the Historical Collection: Paul C. Leonard, '17, until 1920 (replacing C. M. Baker, deceased); Professor A. E. Burton, until 1924.

The Committee recommended no changes in the special committees, i. e., the Alumni Fund, the Runkle Memorial, the Revision of the Constitution and By-Laws.

The Executive Committee recommended to the Council the following proposed change in the By-Laws: A new section, to be called Section 6, of Article I, to read as follows: "The elected officers of the Association shall take office each year at a date to be fixed by the Council and not later than July 1."

This proposed change may come before the Council for action after thirty days from date of publication in the TECHNOLOGY REVIEW.

Professor Tyler spoke to the Council on the work on the proposed War Records and suggested an early meeting of the Association of Class Secretaries.

Professor Tyler spoke further on the question of reorganizing the Technology Club, and announced that a Smoke Talk would be held in the Walker Memorial on Tuesday, June 10, in co-operation with members of the Instructing Staff.

President Morss then introduced President-elect Coleman du Pont, who addressed the Council and acknowledged the honor one received in being elected president of the Association. He spoke of the fact that people outside of Boston do not realize what is being done here at Technology and that those who live about here absorb the knowledge concerning the Institute through the papers and through their contact with Technology men. It is his belief that during the next few years the Alumni Association can in an unusual way help Technology and the student

activities. He suggested that the problem of the alumni relation to "The Tech," if properly handled, gives as an example an opportunity for work on the part of the alumni.

Dr. MacLaurin next addressed the Council and stated how fortunate it was, in his belief, that the Alumni Association has as its new president one who is so interested in the work of Technology and who has such a broad outlook. He believes that the conditions now are abnormal, as confirmed by the experience of the Deans, who were recently at Technology from all parts of New England in conference. They all told the same story of the demoralization of the student body which, however, does not mean at all the depravity of boy nature at this time. It is a fact that the colleges have relatively few in the upper classes, and the larger part of the student body are members of the lower classes and have, therefore, been at the colleges for so little time that they have not assimilated the traditions of the schools. At Technology almost one-half the students are freshmen, and for some time the influence of the upper class men has been depended upon for training the under classes. He suggested that the students looked, foolishly perhaps, upon the Faculty as their natural enemies, and are on that account all the more ready to receive advice from the alumni. He suggested that this is a time of great importance, for never was there a time that offered a greater opportunity for Technology. He has been at the Institute for almost ten years and never has there been so many letters of inquiry from foreign countries as he has received during the past three or four months. He believes it is due to the splendid achievement of our men in the war and the general interest taken by people throughout the world, because of the war, in technically trained men.

MORE FOREIGN STUDENTS THAN EVER BEFORE

STUDENTS at the Institute from other countries number more than ever before this year, there being about one hundred and fifty in this group. There are notable increases in students from Russia, Norway and Spain, the numbers being ten, eleven and five respectively. England, Denmark, Greece and Turkey are the other countries of Europe represented at the Institute.

In South America, Chile has been a country sending very few students here. A prime reason for this has been the existence of the government universities with free tuition. The advantages of education in the United States have been discovered through the investigations of a number of representatives, and there are now at the Institute seven men from this southern republic.

Colombia equals its best previous record with four, while five other countries maintain their number of last year. Mexico has five men, and three Central-American countries have smaller numbers. Canada has not diminished the number of students notwithstanding the war. The Orient, represented by China and Japan, has some fifty men in the school, a number sufficiently large so that there is a Chinese Club in addition to one of Latin-American students and the larger, all-embracing Cosmopolitan Club, with its twenty-five nationalities.

ARMY NOTE

IN a course conducted at Technology by a sergeant, there are several lieutenants, a half dozen captains, and a lieutenant-colonel.

REPORT OF THE SECRETARY-TREASURER FOR THE YEAR 1918-1919

For the first time in the history of the Alumni Association, the administration has extended from May of one year to the May of the following year instead of being coincident with the calendar year.

The present administration took charge of the Alumni Association after the Annual Meeting of the Association in May, 1918, and surrenders its charge to the incoming administration at the Annual Meeting on May 26, 1919.

At present, and for several good reasons, the financial year of the Association remains coincident with the calendar year, and for the sake of comparison the following statistics are as of the date of January 1, 1919.

The membership in the Association on January 1, 1918, was seven thousand five hundred and fifty-four, to which were added the graduates of the classes of '18 and '19 amounting to four hundred and fifty, the class of '19 because as a class it was graduated in October, 1918, after an intensive program. To these were added by election fifty-eight, making a total of eight thousand sixty-two, but during the year one hundred died, which leaves the balance on January 1, 1919, of seven thousand nine hundred and sixty-two, of whom three hundred and forty-three are life members.

During the year, dues were received from three thousand three hundred and twenty-six members, the percentage of those who have paid their dues has dropped from fifty-six and one-half per cent of last year to forty-eight and one-half per cent of the membership. This is readily accounted for by the war and by the large number of our members who have been in service to whom automatically dues notices were sent but to whom second notices were not sent, and with the understanding that the men in service would not be called upon to pay their dues unless they saw fit themselves upon the receipt of the formal dues notice.

For this administration there have been five meetings with an average attendance of thirty-one. The Executive Committee called a special meeting in September at which time it was voted to hold the Council meetings every other month rather than monthly unless the Executive Committee found reason for calling the Council together. This program was followed except that a special meeting was called for the last Monday in April.

Rather than to report in detail what has happened during the year of this administration, President Morss' complete and admirable report of the activities of the Association is referred to as printed in the April number of the TECHNOLOGY REVIEW, Volume XXI, page 143, and is submitted as the Annual Report of the Administration.

Since the Annual Dinner, when Mr. Morss made this report, two meetings have been held besides the Annual Meeting of tonight, and at these meetings the question of co-operation between the Alumni and "The Tech" has been discussed. The report by the Alumni Advisory Committee on Undergraduate Publications made at the last meeting has been accepted, whereby the Alumni will cease active control and representation upon the Board of Editors of "The Tech" on July 1, 1919.

The question of the re-establishment of the Course in General Studies, the Course IX of the time of General Walker, has been discussed and a committee has been appointed to consider this question.

The annual election has taken place and nomination to the Corporation of term members has been made.

The president of the Technology Clubs Associated, Dr. Godfrey of Philadelphia, has appeared before the Council and outlined the plan for a meeting of the Technology Clubs Associated in Philadelphia in September, 1919. An interesting program was outlined with plans to use this meeting to start an interest in the All-Technology Reunion proposed for 1920.

During the past year, by vote of the Alumni Council, when it has been impracticable to obtain a quorum of the various standing committees their duties have been assumed by the Executive Committee except in the case of the General Nominating Committee. Because of the absence of so many members from the various Standing Committees, the reports from the Standing Committees are abbreviated in numbers and in content.

According to the regulations and by-laws, the accounts of the Association have been audited and a report is made to the Auditing Committee upon the basis of an examination by the certified public accountants, Messrs. Patterson, Teele & Dennis. By this report it is found that in 1918 the surplus account was added to by the amount of \$136.43. This is in spite of a deficit of the TECHNOLOGY REVIEW amounting to \$563.74.

An attempt has been made, upon the recommendation of the Council this year, to reduce the volume of the TECHNOLOGY REVIEW by using a different font of type and by lessening the margin of the pages of the REVIEW, with the result that the January number of 1919 had one hundred and forty-four pages, twenty-two pages less than the January number of 1918, which had one hundred and sixty-eight pages. The April number was reduced from one hundred and seventy-six in 1918 to one hundred and fifty pages in 1919. In spite of this reduction, however, the cost of publication has advanced on account of the advanced price in paper and in labor.

Practically all of the money obtained from sustaining members may be accounted for by the increased cost of the publication of the REVIEW. Some of this money has purposely been credited to the REVIEW because of the subscriptions which have been continued to the men in service who have not paid their dues for the past year. The REVIEW has entered the organization of the Alumni Magazines Associated, and will, it is likely, receive increasing income from advertisements of national advertisers, who, through this organization, will see fit to advertise in alumni magazines.

While the amount received from dues for the past year was reasonably large, the per cent of members paying their dues dropped noticeably, and the question will come before the Council as to what steps should be taken toward increasing its revenue if it purposes to extend its activities.

Respectfully submitted,

WALTER HUMPHREYS,
Secretary-Treasurer.

TREASURER'S STATEMENT FOR 1918

ASSETS		
Cash	\$3,680.06	
Accounts receivable	1,200.94	
Notes receivable	1,000.00	
Furniture and fixtures	901.35	
Inventory accounts	981.84	
		\$7,764.19
LIABILITIES		
Accounts payable	\$5.40	
Life Membership account	300.00	
Advance payments	21.00	
Organizations	248.92	
Committee on National Service	6,528.80	
Income, 1919	121.00	
		\$7,225.12
Surplus account		539.07
		\$7,764.19
EXPENSE, 1918		
Secretary's salary	\$500.00	
Labor, alumni office	2,777.89	
Postage, printing and stationery	961.75	
Carfare, telephone and telegraph, etc.	67.35	
Collection expense	6.32	
Council expense	27.00	
Traveling expense	66.67	
Miscellaneous expense	221.03	
All-College Rally	134.44	
		\$4,762.45
10% depreciation		100.15
REVIEW:		
Editor's salary	\$500.00	
Advertising Manager	600.00	
Office labor	619.21	
Paper	2,196.60	
Postage	347.79	
Printing	3,839.87	
Supplies and expense	112.72	
		8,216.19
Excess income over expense		\$13,078.79
		136.43
		\$13,215.22
INCOME, 1918		
*Sustaining membership	\$1,296.00	
Dues, 1918	3,347.00	
Back dues	275.00	
Interest and discount	471.05	
Gifts	15.00	
Annual dinner, 1918	35.54	
Office profit	940.18	
		\$6,379.77
REVIEW:		
Subscriptions	\$3,606.00	
Back payments	274.00	
Advertising	2,898.75	
Other income	56.70	
		6,835.45
		\$13,215.22

*\$337.00 of this amount was credited to TECHNOLOGY REVIEW for subscriptions of men known to be in service.

REPORT OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY COMMITTEE ON NATIONAL SERVICE

THE Massachusetts Institute of Technology Committee on National Service respectfully submit the following report of work for the past year:

The first real work of the committee was to find a successor to Mr. Lansingh as director of the Paris bureau, and fortunately it made a most excellent selection in Mr. Gibbs.

From the reports coming to the Women's Auxiliary it is certain that the work of Mr. Gibbs in Paris has been most efficient and has brought forth much praise, even from other than Tech men.

Our original request for subscriptions for this work was for the year ending 1918, and the committee, after that date, made a renewed plea for the continuance of the 1918 subscriptions for the year 1919, it being their opinion that owing to the end of the war, men arriving in Paris would need money for various purposes, and that the demand for money for this period might exceed the actual war-time demands.

Our fear for the financial distress of the men has not been realized, and the time of continuing the Tech bureau will probably not be as long as anticipated, owing to the rapid demobilization of the army, and it is expected to close the Tech bureau in August or September. Mr. Bemis of our committee is now in Paris and is expected home soon, and we have asked him to consult with Mr. Gibbs as to the time of closing the bureau, and will take action on this matter on Mr. Bemis' return.

Our financial report is as follows, including the subscriptions from the Corporation:

RECEIPTS

Corporation subscriptions	\$18,095.00
Alumni	33,844.80
Total	<u>\$51,939.80</u>

DISBURSEMENTS

War Service Auxiliary	\$18,600.00
Paris Bureau	13,966.56
American University Union	4,000.00
"The Tech"	3,023.24
War Records	1,862.29
Collection of funds	1,054.65
Washington Office	759.74
Miscellaneous	1,154.64
Total	<u>\$44,421.12</u>
Balance on hand	7,518.68
	<u>\$51,939.80</u>

A committee has been appointed by the Council to prepare and publish a Tech war record, and it has been suggested that any balance we have in the treasury be used for this purpose. The committee would agree to this, but has doubts about collecting more money from the alumni if such money is to be used for a war record

rather than for the avowed purpose of the subscription, which was for war service; without at least asking the consent of the donors.

This committee especially recommends that the great service done by the Women's Auxiliary under the able and inspiring leadership of Mrs. Edith Cunningham, and the equally great work done by Lansingh and Gibbs in Paris, with full records of their work, be given a proper recognition in the war records of Technology.

A colonel of railway engineers, not a Massachusetts Institute of Technology man, wrote to the War Service Auxiliary:

"What a splendid work you have done. One has a heritage when he has Tech for an Alma Mater, such as no other institute gives, and how splendidly, too, her sons have done."

JAMES W. ROLLINS,
Chairman.

May 26, 1919.

HALF A MILLION FOR RESEARCH

Noyes and Hale to be directors for the Rockefeller Foundation

AN appropriation of \$500,000 to promote fundamental research in physics and chemistry has been announced by the Rockefeller Foundation. The fund, to be administered by the National Research Council, will be utilized to support during a five-year period several fellowships whose holders working in the laboratories of co-operating universities, will turn over to American educational and industrial institutions the results of their investigations.

The plan, expected to build up a continuously expanding corps of expert investigators, will be put into operation by the selection of a group of "fellows," scientific college graduates especially adapted to research and of an age (twenty-five to thirty years) when "imagination and creative powers are at their best." They will experiment in institutions adequately equipped for such work, in the basic principles of the two sciences, rather than their adaption to particular products, leaving the latter feature to private research organizations, largely maintained by the great industrial corporations, which, with the general public, will benefit by the investigations planned. In no case, the Foundation said, will an investigator have any proprietary interest in his discoveries.

The fellowships, according to the announcement, will lead their holders to important posts in industrial laboratories or to professorships in colleges, create more favorable conditions for research in American universities and lay the basis for more effective national participation in the sharpened industrial competition expected with the advent of peace.

The plan will be administered by Professors Bumstead, of Yale; Kohler, of Harvard; Millikan, of Chicago; Arthur A. Noyes, former president of Technology, in co-operation with Bancroft, of Cornell; Simon Flexner, director of the Rockefeller Medical Institute, and George E. Hale, M. I. T., '90, director of Mount Wilson Observatory, members of the Research Fellowship Board of the National Research Council. The latter organization, operating under the auspices of the National Academy of Sciences, and by executive order of the president, is in close touch with the government, and has representatives in London, Paris and Rome, filling the newly established position of scientific attaches to the embassies.

REPORT OF THE ALUMNI FUND COMMITTEE

ON behalf of the Massachusetts Institute of Technology Alumni Fund Committee I submit the following report:

RECEIPTS

Subscriptions received to March 31, 1919	\$598,412.37
Income	23,132.75
Total	\$621,545.12

EXPENDITURES

Appropriated account Technology Site	\$20,000.00
Appropriated account Educational Equipment	355,000.00
Appropriated account Walker Memorial	160,000.00
Appropriated account Dormitories	40,000.00
Appropriated account Reunion	19,672.06
Cash on hand	26,873.06
Total	\$621,545.12

As payments on account of subscriptions are due October 1 each year and as the first payments were due October 1, 1912, the following table shows the receipts from subscriptions to September 30 each year:

Receipts to September 30, 1913,	\$145,679.36
Receipts year to September 30, 1914,	81,569.14
Receipts year to September 30, 1915,	74,870.78
Receipts year to September 30, 1916,	115,127.64
Receipts year to September 30, 1917,	92,852.51
Receipts year to September 30, 1918,	55,844.85
Receipts six months March 31, 1919,	32,468.09
Total	\$598,412.37

On February 7, 1919, a list was made of subscriptions which at that time had been neither paid nor cancelled, and classified as to date due, and at the same time we have shown the amount by which these subscriptions have been reduced during the year ending February 7, which corresponds approximately to our cash receipts during that period:

DUE	REDUCTION DURING THE PAST YEAR	
October 1, 1912,	\$3,093.00
October 1, 1913,	4,822.00	\$170.00
October 1, 1914,	8,566.00	1,000.00
October 1, 1915,	9,397.00	1,000.00
October 1, 1916,	12,431.00	2,600.00
October 1, 1917,	8,888.00	1,500.00
October 1, 1918,	7,693.00	20,700.00
October 1, 1919,	21,225.00	7,000.00
October 1, 1920,	16,833.00	1,000.00
October 1, 1921,	8,419.00	
October 1, 1922,	993.00	
	\$102,360.00	\$34,970.00

Although the total of these unpaid subscriptions is about \$102,000, there will probably be little more received from subscriptions due October 1, 1915, and earlier, while there will be a considerable loss on subscriptions due at later dates, and it would therefore seem that a reasonable estimate for the future receipts of the fund is somewhere from \$40,000 to \$50,000.

During 1918 the Executive Committee of the Corporation appropriated \$15,000 to educational equipment and \$50,000 to Walker Memorial.

Yours truly,

EVERETT MORSS,
Chairman.

May 26, 1919.

COMMITTEE ON PERMANENT FUNDS

Annual report, December 31, 1918

BALANCE SHEET

ASSETS	
Cash	\$1,847.44
Securities (purchase price)	21,095.00
Personal Accounts	7,585.00
Income in Suspense	200.00
	<hr/>
	\$30,727.44
LIABILITIES	
Rogers Scholarship Fund Capital	\$10,744.13
Loan Account	10,707.59
Life Membership Fund	8,207.21
Alumni Fund of 1880	1,068.51
	<hr/>
	\$30,727.44
Income for the year 1918 amounted to (net)	\$856.76
Interest on scholarship loans amounted to	144.42
Loans repaid (from 33 beneficiaries) amounted to	2,565.00
	<hr/>
	\$3,566.18

Loans were granted to eight beneficiaries, to the amount of \$900.00.

REPORTS OF ALUMNI ADVISORY COMMITTEE

A successful half-year of undergraduate activities during trying circumstances

MR. ALLAN W. ROWE, '01, chairman of the Advisory Council for athletics, presented a report for the undergraduate sports since January, 1919, of which the following is a summary. During the functioning of the Student Army Training Corps, up to Christmas, there could be no student athletic activities, as the military work took up all the available time. But as soon as school opened again in January it was decided to make the attempt. Since there was some question of assessing the student tax this year, a referendum was taken of the student body, which returned an overwhelming vote in favor of assessing half the tax for the remainder of the year. This was done, budgets prepared and modified to meet new conditions, and the work begun under Mr. Kanaly, who had been retained during the period of the Student Army Training Corps work. The success of the spring field day and of various teams showed the wisdom of the decision to begin again this year. The Advisory Council is at present making a complete revision of its by-laws and rules in the light of past experience.

The Advisory Committee of the Musical Clubs reported that the clubs were organized as usual in January, and in spite of the short season for rehearsal, six concerts were arranged and successfully given. An extended trip was, of course, impossible, but the thirty-third Annual Spring Concert was given, on March 7, at the Hotel Somerset, with the success long met with by one of the oldest of our activities. The membership of the clubs was the largest in their history, aggregating seventy men. The finances were well handled and a substantial balance will remain to be invested, as last year, in a government bond.

Like the Musical Clubs, Tech Show met with an overwhelming rush of candidates this spring at the try-outs of the Show, which had to be given this year, later than usual, over Memorial Day, on account of the impossibility of securing a Junior Week at the usual time in April. After the hard times of the last two years the management has been completely reconstituted, and a thorough new system of accounting installed, due to the fact that the progressive break-up of the personnel of the management in 1917 and 1918 left the reports of the organization in a very unsatisfactory condition. Notwithstanding this fact, last year's show, "Let Her Go," saw a profit of one thousand dollars paid to the American University Union in Paris, plus over four hundred dollars for a sinking fund for this year's show.

The show this year, "A Doubtful Medium," was given at the Hollis Street Theatre, to the great satisfaction of all who saw it — a far better place than the Opera House — and in spite of the fact that it was considered not wise to raise the price of tickets, although the cost of putting on the show has almost doubled in two years, a substantial profit was realized. Since these profits need no longer be paid into the athletic treasury, and since the show has long since proved its high value not merely as a means but as an end, this money will be used for the sinking fund, and to enable successive managements to obtain much needed permanent equipment, which will in the long run greatly cut down the cost of presentation.

THE APRIL COUNCIL MEETING

The associate clubs plan a resurrection—an All-Tech reunion in 1920—Technology the balancer of American industry—
“The Tech”

ALTHOUGH the April meeting of the Council is usually in the slack time between the annual dinner and the annual business meeting, this year it proved to be full of business and interest, particularly as regards the meeting of the Tech Clubs Associated at Philadelphia this fall, and the All-Technology reunion of 1920. Alumni interest and activity are undoubtedly on the increase after the taxing months of war, and they are shown to be alive nowhere more than in the proposal to publish a great book, “Technology and the Nation,” a documented study of the growing value of the Institute in the scientific and industrial life of America.

There were also the usual nominations at this time of year and a report on “The Tech” as a continuing alumni organ.

After the announcement of the results of the annual election, which will be found in the official lists at the beginning of this issue, President Morss announced that it is the sense of the Executive Committee that as there are to be no formal graduating exercises this year, there should be no June alumni celebration. There was no opposition to this.

President Morss then announced that as the war is now over the Technology Clubs Associated is planning to resume its annual meetings this fall and introduced Dr. Hollis Godfrey, '98, president of the Technology Clubs Associated, who presented and discussed the plans now under consideration for the meeting this coming fall. Dr. Godfrey stated that he had discussed the plan he has to present with Dr. Maclaurin and a number of prominent Technology alumni. Dr. Godfrey told the Council that he had learned from the war that the need for technical men in public service was greater than ever before. He believes that this should be discussed and provided for in two main ways: (1) the coming fall meeting of the Technology Clubs Associated and (2) the All-Technology reunion to be held probably in 1920. He wants the results of these two meetings to tell principally what Technology men are to do in the future, backed by what they have done in the war. The proposal is to have the meeting of the Technology Clubs Associated in Philadelphia in September and to accomplish two things: (1) to be a big advertising booster for the All-Technology Reunion in 1920 and (2) to produce in five divisions a book entitled, “Technology and the Nation.”

The five divisions agreed upon are: (1) Army, (2) Navy, (3) Federal Service, (4) Basic Industries and (5) Technology and the other four. Each division is to be divided into two parts, (a) service, and (b) the men behind the line who did the extra work necessitated by the other men joining the service. It is planned to have five principal speakers: Crowell for War, Roosevelt for Navy, Baruch for Federal Service, Schwab for Basic Industries and Maclaurin for Technology. Dr. Godfrey said that the best thing that Tech did in the war was to bring about profitable action. There are three days planned for the meeting, the 18th, 19th and 20th of September. Visits to plants are to be cut out and all the time applied to the meetings of the five

branches mentioned. The executive committee of the Drexel Institute has extended an invitation to the Technology Clubs Associated to use their plant for all the meetings. It is proposed that each of the branches of the engineering industries shall have a vice-chairman to work with the industries of the country to establish offices in Philadelphia, with permanent secretaries for three or four months to emphasize the importance of Technology in the industrial world. The industries are to be invited in as equal partners in this meeting, presenting their viewpoint for Technology to hear, Technology in turn presenting to the industries its viewpoint. Dr. Godfrey said that he had presented this plan to the Council for constructive criticism and stated that he was ready to answer questions.

Dr. Godfrey, in answer to a question, stated that there is to be a special committee to arrange for any plant visits that may be desired. As to papers presented, Dr. Godfrey said that he had in mind only brief papers to be presented, more emphasis being placed on the resultant book to be produced following the joint discussions of Tech men and the industries.

President Morss then announced that the Technology Club of Central New York has evolved a plan along this line which Mr. T. H. Skinner, '92, briefly outlined at this time. Mr. Skinner stated that three meetings ago of the Council there was an appeal from Dr. Maclaurin and the Faculty to suggest curriculum changes aiming to make Technology a more potent factor in the industrial world. Mr. Skinner reported this to his club and asked for action on the matter. Two different meetings were held and Mr. H. W. Jordan, '91, secretary of the club, drew up a report showing the position as citizens that Tech men should take. It is felt by the Central New York Club that the technical man in the past has been too narrow, sticking too closely to a strictly engineering line. It is felt that every Tech man has an opportunity to take an active interest in public affairs without entering the political field. The war has served to bring this matter to public attention. Mr. Skinner then read the club's letter to Dr. Maclaurin. Mr. Skinner said that Technology, to him, seems to be the center of the teeter between capital and labor and that Tech men should surely lend their efforts to a proper balance of the teeter. Mr. Skinner stated that the report was too long to read but that the Technology Club of Central New York was eager to help in spreading the gospel of the value of Tech men in public service. He presented through President Morss to Mr. Godfrey the report of his club, with the hope that it could fit in with the plan of the Technology Clubs Associated. Mr. Skinner closed by saying he hoped that one of the results of the September meetings of the Technology Clubs Associated would be needed changes in the Institute curriculum.

Mr. A. T. Hopkins, '97, stated that he hoped there would be large representation of the Faculty at the September meeting, so that they could get in touch firsthand with the proper relations of Tech and the industries. He hoped that some way might be devised to have such men present. Dr. Godfrey answered this by stating that it is hoped that a fund can be raised for the industries and engineering activities to make sure that men like the Faculty may be present at the meeting as guests. Professor C. F. Allen, '72, stated that he thought it extremely advisable that Faculty members should attend this meeting, he feeling that the Tech professors do not get into intimate touch with the industries often enough. Further, the outcome of the proposed educational changes would have to come from the Faculty and, therefore, the members should be on the ground to hear all the discussions. He hoped, however, that undue emphasis would not be laid on tearing to pieces what is being done now in the field of education. To him the most beneficial course for mental training and basic principles is the course in Mechanics and he hoped that

this course could still continue to be emphasized as it is at present at the Institute. In closing he stated that it would be the Faculty who would have to finally separate the chaff from the wheat and therefore thought it an admirable idea that there be a large Faculty representation at the meeting. Dr. Godfrey in reply stated that it is hoped by the committee that this meeting is to furnish a basis of the needs of the industrial world and not to make specific recommendation for changes in the curriculum, this last to be left entirely to the Faculty. In other words, all speeches and discussions should refer to needs of the technical world in general and not be applicable to Technology alone, but to all technical schools.

President Morss then requested an expression of approval or disapproval of the scheme and it was

VOTED: That the Council record its hearty approval of the plans proposed by the Technology Clubs Associated.

The question of the proposed All-Technology reunion in 1920 was next discussed. President Morss announced that the Executive Committee is in favor of a reunion in 1920, and then every subsequent five years and it was

VOTED: That the next All-Technology reunion be held in 1920, and plans be at once started.

President Morss then called attention to the awkwardness of the term of the Alumni Association president, ending as it does in May, and therefore suggested that the plans for the reunion be referred to the Committee on Assemblies to take up with the incoming president when he takes office. President Morss further referred the possibility of changing the by-law governing the term of the president to the Executive Committee for possible change.

Mr. C. W. Gram, '09, then presented the report of the special Nominating Committee to present to the Council nominations for members in the various Advisory Councils on Undergraduate Activities as follows:

ATHLETICS: Dr. J. A. Rockwell until 1922 (Mr. Lawrence Allen is serving on the Committee until Dr. Rockwell returns from overseas); Hunter, '02, until 1922.

BUDGET AND FINANCE: H. S. Ford until 1922.

TECH SHOW: Alexander Macomber, '07, until 1922.

MUSICAL CLUBS: Dudley Clapp, '10, until 1922.

UNDERGRADUATE PUBLICATIONS: Alden H. Waitt until 1924,

(Signed) PAUL C. LEONARD,
O. B. DENISON,
CARL W. GRAM, Chairman.

It was

VOTED: That the men nominated should be declared elected.

In the absence of Mr. William R. Greeley, '02, Mr. P. C. Leonard, '17, presented the report of the Alumni Council on Undergraduate Publications on the question of co-operation with "The Tech."

PRELIMINARY REPORT OF THE ADVISORY COMMITTEE ON UNDERGRADUATE ACTIVITIES]

Pursuant to a request from the Alumni Council, this Committee presents the following report:

The financial history of "The Tech" is divided into periods (a) as a weekly; (b) as a tri-weekly or daily; (c) after appointment of Advisory Council; (d) during war period.

The question now would appear to be whether return should be made to (c) or new relations established, also disposition of surplus accumulated under (d).

The war completely interrupted the student management of "The Tech," and the alumni, in order to save it from annihilation, and serve the war-time interests of the Institute, made Paul Leonard a receiver to straighten out its affairs and run it during the war. Thus the publication has been thrown upon the alumni, and they have been financially responsible for its existence. Previous to this the undergraduate body was not assuming any financial responsibility, but left it to the Alumni Advisory Committee and "The Tech" Board.

From every point of view, therefore, the evolution of "The Tech" into an alumni publication places upon the alumni the responsibility for the proper disposition of the present good-will and assets.

The present situation is that a new undergraduate Board was elected as of April 1, and is at present issuing the paper under Mr. Leonard's continuing supervision, although the books were closed on the preceding volume on April 1.

The recommendations of this committee as to the present situation are:

FIRST: That the financial interest of the alumni in the combined publication be deemed to have terminated on April 1, and that Mr. Leonard be instructed to liquidate as receiver (or administrator) the affairs as shown on the balance sheet of that date on or before July 1, 1919, in which liquidation proper reserves shall be allowed the new Board to issue papers to unexpired subscriptions for which the old Board may have received payment; and that any profit accrued since the balance sheet of April 1 on business since that date, be considered to belong to the new undergraduate publication, together with any good-will value and privilege to solicit renewals in the existing alumni subscription list.

SECOND: That direct control by the representative of the alumni, Mr. Leonard, be gradually given over to the undergraduate Board, as they can be organized to take it, and that active control by the alumni cease absolutely by July 1, 1919.

THIRD: That the surplus accumulated during the period of alumni control, and which may be defined as the amount remaining from the transactions prior to April 1, as shown by the balance sheet of that date, after all just claims shall have been paid and allowances made, and all possible assets liquidated, shall be turned over to a duly constituted committee of the Alumni Council as trustee, and which shall be administered through the treasurer of the Alumni Association by the Advisory Committee as it may be reconstituted, for the benefit of "The Tech."

The committee has conferred with the chairman of "The Tech," "Technique" and "Voo Doo," and will obtain the opinion of the Institute committee before submitting to you its final report on future policies.

Mr. Leonard explained that since the new board of "The Tech" was elected on April 1 he has given over the whole responsibility of the publication to the new board, subject to his veto of unwarranted expenditures. In answer to a question he stated that he believed the question of whether or not the paper should continue as a partial alumni publication should be left to the undergraduates to decide. Mr. Jasper Whiting, '89, hoped that the undergraduates would still deem it advisable to act as a partial publicity medium for the alumni, thus holding the alumni subscribers. Mr. Leonard stated that the thinking undergraduates still want a certain amount of alumni control and that a scheme along these lines, involving possible incorporation, is already underway by Mr. Capps, the new general manager of the paper. In response to a question as to whether it was intended to pay the old bills of "The Tech," Mr. Leonard stated that a lot of them are owed to concerns now out of business and otherwise scattered, so that it seems to no one on the com-

mittee advisable to pay the older bills. He further stated that they are practically all outlawed through lack of funds. A number of members of the Council, however, stated that we should at once pay all old bills and give the boys a fresh start.

The recommendations of the report were adopted as printed in the accompanying text in this issue of the REVIEW.

On the call for new business it was

VOTED: That the Advisory Council on Undergraduate Publications be asked to make a report at the next meeting of the Council after conference with the Board of Editors of "The Tech" in regard to the future relations of "The Tech" and the Alumni Association.

Mr. R. A. Hale, '77, called the attention of the Council to the forthcoming meeting of delegates of the engineering societies of the country with reference to "National Board of Public Works," to be held in Chicago early in May and hoped that the Technology Clubs Associated could work in co-operation with this meeting.

ORVILLE B. DENISON,
Secretary pro tem.

SELSKAR GUNN LEAVES TECHNOLOGY

Health expert cables his resignation from Paris

A NUMBER of changes in the personnel of the biological department at the Institute are announced. In the first place Professor S. M. Gunn, '04, who has been on leave for a couple of years, has resigned from his position. This notice coming by cable is as yet without an explanation, but it is surmised that he is to enter permanently into public work of some larger kind. Professor Gunn was selected by the Red Cross and International Health Board to assist Dr. Livingston Farrand in the work in France of combating infant mortality and tuberculosis, and he has remained with this humanitarian effort till now. It seems not unlikely, therefore, that his resignation is in order to be free to continue national or international work of similar character.

On May 1, Professor W. T. Sedgwick left Boston for a trip across the Continent, being scheduled for a course of six weeks in the summer school of the University of Berkeley, Cal. He paused a little while in New York City to lecture in the public health courses given by the Municipal Service Association. During Dr. Sedgwick's absence his courses will be carried on by Professor S. C. Prescott of the department.

Another of the instructing staff of the department of biology, has been given leave and Murray P. Horowitz, B.S., instructor in biology has gone to Oklahoma to carry forward the sanitary survey of the State that he began last year. This is the first intensive survey of an entire State for sanitary reforms, and on account of the war demands in personnel, the program of last year was cut short. Mr. Horowitz is to complete it according to original specifications.

Professor Prescott will carry forward Mr. Horowitz's courses in the Institute, while those which he is giving at Wellesley will be cared for by Dr. F. H. Slack, who is also instructor at the Massachusetts Institute of Technology.

COLEMAN DU PONT, '84

The new president of the Alumni Association — as seen by the
American Magazine, November, 1918

"GENERAL DU PONT is behind it."

That has come to be the fashionable verdict of the financial world whenever rumors spread that some gigantically important deal is brewing. And sometimes the conclusion is right, for Coleman du Pont has done and is doing more big things than almost any other financier or captain of industry in America. Wall Street never knows where his activities are likely to break out next. He confines himself to no one groove.

One day he is disclosed as the builder right in the heart of the Wall Street district of the largest sky-scraper in the world at a cost of \$30,000,000. Next he electrifies the whole financial and business community by quietly buying up control of the world's best-known insurance company, the Equitable Life, with its \$600,000,000 of assets and outstanding insurance of \$1,500,000,000 after a succession of battles royal among kings of finance, including J. P. Morgan, E. H. Harriman and Thomas F. Ryan, for control of this stronghold of wealth and power. The most famous hotel keeper in America dies, and scarcely has the public ceased to read tributes to his worth from all classes from President Wilson down, when the news leaks out that Coleman du Pont has taken over the establishment, the Waldorf-Astoria. Or a company is organized to extend financial assistance on merciful terms to thousands of workers and others in needy circumstances and, lo, du Pont is at the head of it.

"How have you been able to do so much, in so many different lines?" I asked this sleepless, ubiquitous doer.

"I haven't done much — I don't do much, I pick other men to run things for me," he replied with a directness of speech that is characteristic of his actions.

"But how do you go about making your selections of men?" I further queried.

"You can hire a good doctor or lawyer or other professional man; but you have to find a good business man," was his response.

"Where or how do you begin to look for the good business men?" I persisted.

"Where? I'm on the lookout for the right kind of men everywhere, anywhere and always. I've found them North and South; I've found them in factories, in banks, in steel mills, even under the ground — in coal mines. Whenever I spot a man who has made a good start I watch him, I follow his progress, I try to get a correct record of his ability, I find out all I can about the results he produces."

"What are the qualities he must have?" I probed.

"Ability."

I smiled. "How do you analyze, how would you define, ability?"

"Ability is the thing that gets results honestly," was the emphatic reply.

"Get a man with ability," he added, "who also has enthusiasm — and, of course, absolute honesty and fairness; then give him full responsibility, give him whole-hearted support, and you will get the one thing you want, results."

"I have been told that once you pick a man for a job you never interfere with him, but put all decisions, all responsibility, directly and wholly up to him," I remarked.

"Certainly if I am to hold him responsible for results, he must have freedom to make all decisions. If a man wants my advice, my judgment, I am always ready to give it to him; but I insist that he make the final decision, that the action taken must be his, not mine, as he is responsible for the outcome, not I.

"Some men make the mistake of overruling their lieutenants, of not accepting their judgment. How can you expect to develop the best that is in a man if you don't allow him to exercise his judgment and don't let him shoulder the entire responsibility for the results? If a man fails to make good, if his judgment repeatedly proves unsound and the results are a failure, then of course I replace him."

As a matter of fact, Coleman du Pont has the reputation of uncanny judgment in choosing lieutenants to manage his enterprises. He has developed almost as many young business geniuses as Charles M. Schwab has. His record reflects and proves this, for success has crowned every project he has taken up — and they have been many, varied and monumental — in the course of his eventful, dynamic career.

His military title, by the way, came through his interest in the National Guard. His work in that connection led four successive governors of Delaware to appoint him a brigadier-general on their staffs.

The name "du Pont" conjures up in the public mind riches and powder. Coleman du Pont was born poor, and never had anything to do with powder, except in his capacity as a grimy, work-a-day coal miner until he had made his mark and his fortune in other things. His father, Antoine Bider-Pont, though of the famous du Pont family of Delaware, had no interest in the ancestral powder organization, but was engaged in several industrial enterprises in Kentucky at the time Coleman was born, in Louisville, on December 11, 1863. After his preliminary schooling, finding he had a liking for engineering, young du Pont proceeded to the famous Massachusetts Institute of Technology. Here he played as hard as he studied. Six feet four inches in height and weighing two hundred and ten pounds, not a pound of it superfluous fat, he made an ideal captain of the football team, stroke of the crew and captain of the baseball nine. He could run one hundred yards in ten seconds. He was also a crack shot, a powerful swimmer, a tug-of-war giant, and a doughty competitor in the wrestling and boxing rings. Breaking bronchos was another of his favorite sports. All this, however, did not prevent him from graduating creditably.

He did not aim at starting at the top or halfway up the ladder when he sought a job. He actually began as a mule driver in a coal mine, at Central City, Kentucky. From mule driving he graduated to the blacksmiths' shop in the mine, and later, through various grimy and sweaty stages to the status of a full-fledged miner.

Next he was made mining engineer, and his work became so effective that he was finally appointed general manager of the property.

It was significant of his democratic make-up that the first thing he did on gaining chief power was to launch a comprehensive plan for the remodeling of Central City, including the erection of comfortable homes for his co-workers, the laying of good streets, and roads, the installation of a modern sewerage system, water works, electric lighting system, etc. He also encouraged the community to build schools and churches, to open parks and to maintain recreation grounds. He did it all without suggestion or taint of paternalism. Indeed, the old inhabitants still delight to relate how he democratically attended weddings and baptisms and funerals and was altogether as one of them.

For ten years he remained in that field. Then, when he investigated and found that the highest salary paid in the whole coal region was four thousand dollars, he looked for a wider sphere. The steel industry was then attracting some of the best brains of the country and yielding generous rewards. He opened negotiations with the

heads of the Johnston Steel Company of Johnstown, Pennsylvania, whom he knew; and they gladly elected him general manager. Here he not only made good as a steel operator, but found an ideal field for his irrepressible energies in building street-car lines. The presidency of the Johnstown Passenger Railway Company was one of the many offices he filled — this one, in fact, he still fills.

In a few years he had built traction lines in Pennsylvania, New York and New Jersey, and had also embarked on coal-mining enterprises, with such success that he decided to retire from active business. He bought extensive farm lands in Maryland and Delaware, took up residence there, and began to conduct scientific farming on a mammoth scale, including the breeding of high-grade draft horses, pedigreed cattle, sheep and other farm animals. He was an enthusiast on the subject of good roads, and he conceived the idea of building a model road clear through the state of Delaware, a project which, at a cost of more than two million dollars, is now well in hand.

Cincinnatus-like, Farmer du Pont received a call to more important duties. The head of the famous du Pont Powder Company had died, and a family council resulted in a summons to Coleman to take the helm. He was not quite forty. The life of a farmer, he had quickly discovered, did not afford the fullest scope for his head and hands. He had all the money he needed, but other urgings and motives impelled him to re-enter the business arena.

What Coleman du Pont did for America's premier powder plant forms history. When he took hold there were seven clerks in the main office of the company — although this company had important interests in associated explosive enterprises. When he stepped out in 1915 there were some three thousand employees in the main office. The first thing he did was to amalgamate all the different offices and scores of sub-offices controlled by the du Ponts into one strong, efficient corporation. Production was systematized and standardized. Able, high-priced managers were installed and clothed with large responsibilities and were offered premiums for results. For four or five years Coleman du Pont arose at five o'clock in the morning and, as he once remarked, "thought powder, talked powder, ate powder, dreamed powder all through the day and night." By-products, formerly little regarded, were manufactured into two hundred and fifty different commodities. When the call came for munitions to fight the Huns, the du Ponts almost overnight were able to multiply their output by one hundred per cent by instantly placing on construction work an army of forty thousand men.

Then having placed the organization on a smooth working basis, Coleman du Pont did what for him was the natural thing: he stepped out. The rehabilitation, reconstruction, the upbuilding of the organization, had interested him intensely; but that job finished, he was content to leave the management of it to others. He must needs tackle something new, something difficult, something demanding daring. So he sold out his powder interests at a profit of a million for each of the more than thirteen years in which he had managed them.

It was at this stage (1915) that he decided to build the \$30,000,000 Equitable Life Building. Scarcely was the paint dry when he coolly purchased, chiefly from the Morgan interests, a controlling amount of the stock of the Equitable Life Assurance Society itself, with the avowed intention of placing ownership of the company completely in the hands of its half million policy holders. Other financial giants had fought for possession of this all-powerful financial weapon and had talked of mutualizing the company. Du Pont talked little but did mutualize it, selling his stock to the policy holders at a net loss of \$2,000,000. When asked at the time why he had carried through so costly a transaction, du Pont replied: "I thought it was

only right that the company should be owned by its policy holders, and I was glad, therefore, to be able to put it through. I guess I can stand the loss."

That last remark, "I guess I can stand the loss," throws light on Coleman du Pont's method of handling men. Said one of the young men whom he "discovered" and who is now building up a remarkable reputation:

"One funny characteristic of General du Pont is that, unlike most capitalists, he does not go into a thing simply for the money there is in it for himself. I know from actual experience. More than once, when I have been with him in a proposition, he has balked at accepting a fair share of the profits. 'You did most of the work; you're entitled to the results,' he has insisted. Naturally, when you are associated with a man of that type, you put the best that is in you into whatever he asks you to take hold of. Maybe the reason he has always made a lot of money is that he never was too blamed anxious to make a lot of it. He enjoys doing a big or difficult job far more than he enjoys any monetary reward."

The emphasis General du Pont places on results led me to hint that he is not partial to theorists.

"No. I want practical men, men who show they can deal with things and men rather than figures on paper," he replied vigorously.

"Do you give preference to college men in looking for young aides?"

"If a man has ability and ambition, a college education will help him," he replied. "But here also I want to look into results. *Was he a nonentity at college? Did he make no impression while there? Or was he singled out by his college mates for distinction and honors? Was he made captain of any athletic teams? Was he elected president of his class? Or did he carry off signal honors at his exams? Did he do anything to make his mark in one direction or another? Was he a mediocre nobody, or did he demonstrate he had something worth while in him?*

"Between a college man of ability and little ambition and a non-college man of ability and whole-souled ambition I prefer the latter every time. No amount of education will make up for a lack of never-say-die ambition. Ambition is what drives a man forward. It forces him over all kinds of hurdles. The fellow with one hundred per cent ambition, even though he may not have transcendent ability, will go farther than the fellow with ability, but who lacks ambition."

General du Pont, it should be explained, does not as a rule personally select candidates for the less responsible positions in any of his organizations; his forte is picking lieutenants, men whom he can place in charge of an enterprise, men who have already had business experience. It is his success in this direction that has enabled him to control and run half a score of important enterprises at one time, enterprises as diverse as coal mines and the largest powder plant in the world, thousands of farming acres and the largest hotels in the land.

"Tell me," I said, "just how, for example, you hit upon the man you did hit upon to manage the various coal companies you acquired down South."

"Certainly. Long ago a young fellow drove mules for me. He was the best mule driver I ever had. His father before him was a good man. The young fellow — his name is Shelby J. Gish — sent himself to college after three or four years in the mine. At college he played good football, rode bicycle races and the like. Later he began buying coal lands for himself. Although he started with nothing, he finally owned and operated a coal mine. He then commenced developing oil and gas in that country — Kentucky — which field had never been touched by any of the many capitalists interested in oil and gas lands. It wasn't hard for me to see that a man with that amount of originality and developing and constructive ability, with his practical knowledge of coal, was the right man to run all of my coal properties. And results showed that I made no mistake."

The Chemical National Bank of New York, for many years the largest and most influential in America, controlled by the oldest and most aristocratic families in New York, and later by Hetty Green, decided a little more than a year ago that it needed an infusion of new blood, preferably from out of town, so as to widen the institution's connections. General du Pont was consulted and he recommended a thirty-seven-year-old Southern banker, Percy H. J. Johnston. When this young financial genius stepped into the senior vice-presidency, the bank's deposits totaled \$35,000,000. In twelve months they had soared to \$75,000,000, a gain of three quarters of a million dollars every week! Johnston is now looked upon as one of the most notable "comers" in the whole financial community.

"I first met Johnston," the general explained in reply to my queries, "when he joined the Citizens' National Bank of Louisville as a clerk. His fine physique, his excellent manners, the way he handled himself, impressed me, though he was then a very young man and had had no opportunity to make a record for himself. The next time I went down he had been promoted. The bank's deposits meanwhile had gone up. I learned that he was a hard worker. Next time I went down he had been elected vice-president, and the deposits were still rising. I made it my business to know him at close range, and I was convinced he was big enough for New York."

Next I asked about the qualities of the man General du Pont installed to run the Waldorf-Astoria, Lucius Boomer.

"Mr. Boomer has made good in every hotel proposition he has ever been responsible for," said the General, with typical directness. "He is very able, most practical, a good business man, and honest, hard working — scrupulously fair, always."

General du Pont, it may not be known, is perhaps the largest hotel owner in America. He built the imposing du Pont hotel and the Hotel McAlpin, New York, the latter among the largest in the world. His chief reason for acquiring the Waldorf was that he had in Boomer a man who could run it successfully both from the public's and the profit standpoint. "Men make an organization; not its bricks or its machinery," is a favorite du Pont maxim.

He applied this principle when he took over the direction of the du Pont Powder Company.

"We then engaged," he said, "the best men we could find. We paid six men very large salaries, and results proved they were the cheapest labor we had, for their brains made many thousands for the company annually." How successfully this system of choosing the right caliber of men worked out is illustrated by the fact that the business of the company was developed from a few millions to over three hundred million dollars annually. These six executives, as well as the rank and file of the du Pont skilled workers, were placed on a bonus system, reflecting the general's invariable rule for giving his co-workers a fair share of the results earned.

"I never engage an executive who isn't fair," he remarked.

"What do you mean by 'fair'?" I asked.

"I mean that he must deal fairly and squarely with everybody and that, in particular, he must have the right attitude toward labor. There is a lot of talk about possible trouble of a serious and widespread nature between employers and employed after the war. I personally am not alarmed, for if labor is treated as it should be treated, it will have no real occasion to kick over the traces. I have always managed to get along pleasantly with labor, and I will never select a lieutenant who is not so constituted that he cannot help but treat his workers fairly and uprightly. The man who has not learned how to get along smoothly with workers is not the type of man to place in a responsible executive position.

"In addition to being fair, the man I want must, of course, have other qualities.

I want a man who is fearless: courage, self-confidence, self-reliance, are very important essentials. The business game cannot be played by a mollycoddle.

"Then the right type of man is democratic. He must not consider himself a superior sort of personage. He must actually feel democratic; it is not enough that he try to pose as democratic — he must be democratic, otherwise the veneer, the sheen, would wear off, for you can't fool a body of intelligent American workmen for very long. He must ring true.

"Another point: I always want a man who looks after his health. A strong, upstanding, square-shouldered fellow, whose muscles are whipcord rather than putty, is usually apt to forge ahead against all sorts of odds. The man who is of inferior physique and who doesn't look after his health properly is less likely to succeed. Good health, in a sense, is at the base of all business achievement, for the pace nowadays is too gruelling for weaklings. The time a man's best effort is most needed is when a crisis has to be faced; and unless a man is thoroughly fit physically, the extra strain and stress and emotion are apt to play havoc with him at the crucial moment. Year after year I kept myself so strictly in trim that my weight did not vary five pounds from what it was when I left college.

"To win in the business game — or any game, including the game of life itself — you must enjoy it. There is something wrong with a man who does not enjoy his work more and more as he gets older. This is not only my own experience but I find it is the experience of a number of successful men with whom I have talked. A man should grow happier as he grows older, and he can grow happier — I don't see how he can fail to grow happier — if he is on the right terms with his work.

"Here again the question of health enters. To enjoy business, to enjoy life, to be fit to carry out hard or big things, a man must be in sound physical condition. Therefore, any young man who aspires to become a leader in his line should early learn the vital importance of strengthening, building up and tuning up his physical machine. I have emphasized the necessity for having ambition; but ambition is not likely to get a man anywhere unless he has a head, a body and hands capable of carrying out his ambition. Mere wishing gets a man nowhere. He must back up his wishes with action, and action is dependent in no little measure upon a man's physical stamina.

"Don't misunderstand me. I am not a stickler for what is ordinarily understood by the term 'hard work.' Once I place a man in charge of something I don't care a rap whether he works ten hours or only one hour a day — although I confess I have never known a man who could produce the right results by one hour's effort a day.

"The higher type of man can produce the best results if given an entirely free hand. He must be allowed freedom to do things in his own way. Also, the responsibility of making decisions must be left to him. I never decide things for any of my lieutenants. They must make their own decisions. How, otherwise, could I hold them responsible for results? But don't you see that under this system a man knows and feels, if success is achieved, that he is entitled to the credit, not me? This develops a man as nothing else can.

"Of course, not all men are capable of filling positions which carry the responsibility of making important decisions. Some men can work wonderfully for other people; they are ideal tools, or implements, when guided by others. But they lack initiative, originality, self-courage. They are capable, faithful, valuable followers, but not leaders."

"How can you tell which type a man is, and whether he can develop into a first-rate executive, resourceful, daring, progressive?" I asked.

"You have a feeling —" the general, for the first time, hesitated; he appeared puzzled. "I don't know what you could call it except 'intuition'; you sort of feel sure — something inside tells you that a certain man has the right material in him, and that he will develop into a big winner, a great result-getter."

"What are some of the characteristics that inspire this intuitive feeling?" I prodded.

"Brightness, alertness, pleasantness, on-the-toe-ness. Evidence of being practical, a doer, not a theorist or dreamer. A fine physique and robust health are important and attract. But, first, last and all the time, ability as proved by results. What has been his record as youth and man? What impression, what mark, has he made?"

"From the very start a youth begins to shape his whole future career. What he does or fails to do, today, governs to a large extent what he will do or fail to do tomorrow. Business men — at least in business matters — are sternly practical. What they want to know about a man is, 'What has he done?' Each man writes his own answer. The sooner every young man in the country realizes this, the greater will be his chances of recognition, advancement and final success."

"Success," I asked, "real success, does not, apparently, consist of making enough money on which to retire, for you re-entered the business stage after quitting it once."

"No. This idea that so many people have that they will have a glorious time after they can retire, and that until then they must simply wrestle along somehow, in a rather joyless fashion, is wrong — as wrong as it can be!" General du Pont declared with fire. "If you haven't sense enough — or philosophy enough — to order your life and work so as to get genuine satisfaction and fun out of it as you go along, you certainly will not get any bumper measure of enjoyment when the day comes — if it does come — when you can step out of everything. There is more fun in producing, in creating something, whether it be a great building or an industry or only a dog kennel, than there ever can be in idleness. The person, therefore, who fails to derive satisfying happiness from his daily endeavors will enter only a fool's paradise when he quits work to enjoy — or rather suffer — leisure. Happiness in work not only goes hand in hand with success in work, but hand in hand with success and happiness in living. The retirement idol that so many people set before them is a delusion, a myth. If your work doesn't yield you satisfaction, money never will."

AN ASSISTANT FOR COLONEL COLE

By order of the president, Lieutenant James W. Boyer of Chelsea, who served during the war as head field clerk of the 26th Division, was appointed assistant professor of military science and tactics at the Massachusetts Institute of Technology.

Lieutenant Boyer, who is a graduate of Chelsea High School, enlisted in the regular army five years ago as a private. At the outbreak of the war he was appointed field clerk, and upon the formation of the 26th Division he was assigned to that organization. His service in that capacity was of such high calibre that he was commissioned in the regular army upon the personal recommendation of Major-General Edwards.

EDITORIAL—THE BEAVER

The nature-faking rodent—a wrong ideal for Tech men

The life of the beaver is rich in edifying material, but the preachments and morals concerning his life appear to have been made, mostly by censors and professional uplifters, without the golden facts. Their pointing to the beaver for lessons and teachments in the world of Nature would not be so bad if they called attention to actualities. The beaver ever has a purpose; he never works unless he has to do so, and that is possibly one day out of seven; he is efficient; and though his accomplishments are monumental, he is master of the fine art of rest.—The Saturday Evening Post.

In the pleasant days of old we believed what we were told,
And we thought that books were true beyond mistaking,
Never thought that paws and maws took the place of Santa Claus,
Never thought that Dr. Stork was —nature-faking.
But since Science, on the loose, has dispelled each ancient ruse,
Proving Muir and Seton-Thompson gay deceivers,
We are not at all surprised, once the tale is analyzed,
To be told that we are wrong about the beavers!

Beavers, folks said, never shirked, always labored, toiled and worked,
Put in time and time-and-a-half and time again,
Worked by artificial light, Sunday morning, noon and night,
A-constructing of their sub-aquatic den;
And each Tech man near and far, hearing what the beavers are,
Shouted, "That's the way they work us down the line!"
So the Council passed a vote. On our letter-heads you'll note
"M. I. T.—a Beaver rampant," for a sign.

But if the Sat. Eve. Post says true, here's a pretty how-de-do,
And we'd better hunt to find another totem,
For the beavers now, they say, agitate the six-hour day,
And will strike and sabotage until we vote 'em.
They have left the A. F. of L, and are headed straight for—well,
Where the Bolsheviks and Wobblies are coal-heavers.
Those are foreigners and such that we don't respect too much,
But to think we must admit it of the beavers!

Brothers of the Institute—let us can the lazy brute!
Let us chuck him from our signs and our affections,
Let them say no more, by heck, that the beaver stands for Tech,
Lest we lose by undesirable connections.
Let the beavers have their larks with the doctrines of Karl Marx,
Never more to flaunt upon our letter paper.
Something that is SURE to go, a turbine or dynamo,
Seems, to stand for M. I. T., the proper caper.

R. E. R.

WAR SERVICE BOOK TO BE PUBLISHED

Association of class secretaries discusses methods of obtaining information of Technology in the war — twenty-six classes represented

THE Association of Class Secretaries held a dinner in Walker Memorial, Thursday evening, June 19, the chief object of which was to discuss the problem before the War Records Committee, and methods of co-operation between the class secretaries and the committee for the purpose of publishing a record of the war services of Technology men. One of the important purposes of such a volume is naturally to pay homage to the men who have given their lives to their country's service; the volume would not be so much a memorial to individuals as a record of the whole service of the Institute and its men. The Alumni Council, recognizing the desirability of having a record of the activities of Technology men in military and civilian service during the war, appointed the War Records Committee of the following men: Dr. H. W. Tyler (chairman), Walter B. Snow, '82, Harry H. Young, '91, G. D'W. Marcy, '05, H. G. Pearson (Faculty). This committee held its first meeting June 6 in Walker Memorial, at which time the general problems of the committee were discussed and plans made for the approaching meeting of the Class Secretaries Association which was held last night.

After dinner Dr. Tyler passed around a provisional draft of the circular letter to alumni in regard to war service, and a tentative plan of the table of contents for the War Records Book. He then stated what the committee had done at its first meeting, and spoke of the necessity of complete co-operation on the part of the class secretaries and Technology men in general. Dr. Tyler then gave the general plan of the committee which is to organize a staff to collect the material, and put it in shape for publication. This staff would probably include a general editor, a military editor, a civilian editor, a secretary and clerical staff, who would have oversight of the preparation of the book, and the arrangement of its chapters, and also be responsible for co-ordinating the work of the different editors. The civilian editor would have charge of the service record of the civilians and would, with the committee, determine what kind of civilian service would be considered. The secretary and clerical staff would have more detailed work in following up missing men.

The question of financing such a publication was discussed by Dr. Tyler, who stated that the committee had \$5000 available as working capital. This money is a balance left from the fund collected for the work of the Technology Committee for National Service.

Dr. Tyler then asked for suggestions and questions in regard to the work of the committee, and plans for obtaining the co-operation of every Technology man. Mr. Fay suggested that a letter with return form be sent to all Institute men requesting them to give statistical information and a brief personal statement of their services during the war.

The possibility of getting data from the records in the adjutant-general's office in Washington was discussed along with other methods of obtaining information

of Technology men. Professor Pearson spoke of the help which the work already done by the War Service Auxiliary would be to the committee.

The Association passed a vote giving their hearty approval of this work. They also passed a resolution that notices should be sent to the alumni stating the financial needs of the committee and asking for a continuance of their support.

It is expected that each secretary will receive a report of the meeting and will as promptly as possible start work in his own class, verifying his list of addresses and if needful appointing a class committee which will be in active communication with the general committee and with the alumni office.

The detailed secretary's notes of the meeting are as follows: There were present: '68, Richards; '71, Rollins; '78, Collier; '80, Barton; '83, Chase; '84, Tyler; '86, Robbins; '88, Snow; '91, Young; '93, Glidden, Fay; '94, Prescott; '95, Brackett; '99, Hinckley; '00, Bowditch; '01, Williams; '04, Stevens; '05, Marcy; '06, Kidder; '09, Main; '10, Green; '11, Denison; '15, Scully; '18, Howe, Van Kirk; '19, Doten; '20, Coyle; '21, Worcester; '22, Scott (The Tech).

The chairman of the committee outlined the plans of the committee for organizing an editorial staff, enlisting the co-operation of class secretaries and others in collecting the information by a general inquiry circular, and circulating it when published. The Association passed a general vote approving the plans, and strong general interest was expressed.

It was also noted to be the sense of the meeting that the Alumni Committee on National Service should invite their monthly contributors to continue their payments for the support of the present undertaking and that the committee consider the practicability of enlarging the list of contributors by inviting new contributions from the alumni in general.

There was a general discussion of many phases of the problem, leading to the following suggestions:

FINANCIAL: Subscription and dollar deposits with the general circular of inquiry; advertising the ten-dollar edition in the REVIEW.

PRELIMINARY WORK: Announcement of plans in the July TECHNOLOGY REVIEW.

Each secretary will appoint himself or some other active representative or committee of his class to be in constant communication with headquarters. In the large recent classes careful arrangement should be made for distributing the work of correspondence by enlisting men from each department, they reporting to the class secretary or representative. Publicity at class reunions in the near future is important.

The list of addresses for each class should be checked up as soon as possible with the alumni office.

The co-operation of every fraternity should be sought.

QUESTIONNAIRE: This should be sent out to all alumni, if possible, by July 1, with a carefully framed letter of inquiry and an information blank to be returned. The envelope in which the material is sent out should have a special and attractive imprint. Opinion is somewhat divided as to whether stamped return envelopes should be used.

It is suggested that questions on which men would have to reflect shall be avoided, in order to guard against delayed reply. An early date of closing the polls should be emphasized.

It should be stated that all material, whether published in the book or not, will be turned over ultimately to class secretaries.

There shall be a request for the men to indicate the class with which they choose to be affiliated.

Every recipient should be asked to return the blank, whether he has been in

war service or not. For this purpose, other questions, verification of address, etc., should be included. In following up men in recent classes, where changes of address are frequent, the original home address should be used also.

MISCELLANEOUS: Any war service before coming to the Institute should be included.

Civilian service might be based on the receipt of a salary, even if only a dollar a year, or on transfer of location; but men should be included, for example, who have been exempted from the draft on account of being engaged in important war industries.

Space might be economized by writing up the war work of organizations, as such; for example, Stone & Webster, with cross-references for men in the organizations.

The general arrangement would be by classes, with an alphabetical name index.

The Honor List of men who have lost their lives in service should be sent out with the inquiry circular, in order to be sure of its completeness.

Copies of the book would ordinarily be sent to the relatives of men in this Honor List.

The central office should be responsible for soliciting, receiving and compiling information. The class secretaries will be expected to assist, sending material, if desired, at the same time and calling up personally men who do not respond to the general inquiry. The central office will be expected to keep the secretaries fully and promptly advised as to returns.

It is desirable that the book should be published in time for the anticipated Alumni Reunion in June, 1920.

A new register of alumni is desirable if it can be financed, as the present undertaking will undoubtedly yield much important information.

H. W. TYLER,
Chairman War Records Committee.

NOTE TO CLASS SECRETARIES

(In connection with the accompanying memorandum of the recent meeting of the Class Secretaries Association).

The immediate requests to all class secretaries are as follows:

FIRST: To designate himself (or some other member of the class) for active co-operation with the War Records Committee.

SECOND: To see that the class list at the Alumni Office is as complete and accurate as possible in order that the general circular now in preparation for mailing about July 1 may reach everybody.

THIRD: To send as promptly as possible the best suggestions as to men who might be available for pay service, as general editor of the War Book, or otherwise.

Mr. G. D'W. Marcy, representing the Class Secretaries Association, may be consulted in regard to matters of procedure.

Replies to this note may be made to H. W. Tyler, Chairman of the Committee, Charles River Road, Cambridge.

M. I. T. MEN IN SERVICE

74 per cent of commissions to date, May 26, 1919

Men in service.....	2799
American Expeditionary Forces.....	1227
Navy.....	557
Aviation.....	479
Commissioned Officers (74%).....	2091
Ambulance, Red Cross, etc. (A. E. F.).....	62
Rank above Major.....	93
Citations.....	57
Deaths.....	108

ADDITIONS TO THE HONOR ROLL

May 23, 1919

- WALCOTT, WILLIAM W., '01, March 16, 1919. Captain Medical Detachment, 101st Engineers, A. E. F. Died of "Military Tuberculosis."
- CROSS, CHARLES R., JR., '02, October 8, 1915. American Distributing Service. Died at Military Hospital, No. 64, Dinard, France, result of automobile accident.
- SMITH, CHARLES McLEAN, '10, October 4, 1918. 308th Infantry, G Company. Died of wounds received in action in the Argonne.
- ROGERS, RALPH TUPPER, '18, January 8, 1919. C. Q. M. (A), U. S. N. R. F. C. Died of pneumonia at Base Hospital, Pensacola, Fla.
- SCHAFER, HAROLD, '09, October 30, 1918. Sapper, Lan.-Corp. 7th Canadian Engineers, B. E. F. Killed in action near Thiers, France.
- THYNG, ELMER FORREST, '15, January 16, 1919. 2d Lt. Company G, 1st Corps Headquarters. Discharged December, 1918. Died of pneumonia in Youngstown, O.
- THOMSON, STUART, '09, March 23, 1919. Captain Ordnance Department. Discharged. Died in Brookline, Mass.
- PELTIER, PAUL DESNOYERS, '19, April 1, 1919. 2d Lt., Sanitary Corps, discharged. Died from results of an accident in Asia Minor, at Eski-Shehir.
- CATTON, RICHARD B., '15. About May 1, 1919. 2d Lt., Air Service, Signal Corps. Died at Base Hospital at Savenay, France, after six months' illness.

ADDITIONS TO THE CITED LIST

May 23, 1919

- HOLMES, JAMES HILL, JR., '18, Captain Infantry. D. S. C. awarded posthumously for bravery in leading his Company at Soissons, France, July 18 and 19, 1918.
- DEWEY, BRADLEY, '09, Colonel. Chemical Warfare Service. Received D. S. C. Recommended by Secretary Baker for war work in U. S. A., April 6, 1919.
- CANFIELD, EDWARD, JR., '12, Lieutenant-Colonel Engineers. Awarded the D. S. M. for exceptionally meritorious and distinguished services while Assistant Chief of Staff, G-1, of the 4th Division, organizing entire system of supply for the Division.
- GASKILL, CHARLES S., '99, Lieutenant-Colonel Engineers. Awarded D. S. M. by General Pershing for exceptionally meritorious and distinguished services, in charge of locomotives and car repair shops at Nevers, showing rare executive ability and engineering qualifications of the highest order.
- LONGLEY, FRANCIS F., '05, Colonel Engineers. Awarded D. S. M. by General Pershing for exceptionally meritorious and distinguished services. He has been in charge of the Water Supply Service and as commanding officer of the 26th Engineers, a water supply regiment, since the fall of 1917, showing untiring energy, unusual initiative and good judgment.
- MACLEOD, NORMAN D., Major. 103d Field Artillery. Croix de Guerre, with palm.
- AULTMAN, DWIGHT E., Brigadier-General. 51st Artillery. Croix de Guerre with palm.
- ALLEN, ROBERT M., Sous-Lt. 40th Regt. Artillery, French Army. Regiment received Medaille Militaire. He received the Croix de Guerre with bronze star.

Compiled by Massachusetts Institute of Technology War Service Auxiliary, 491 Boylston Street, Boston, Mass.

CAMOUFLAGE APPARATUS AT M. I. T.

Building One houses most complete set in country—presented to Institute by Navy Department

ON the second floor of Building One, at the Institute, there is one of the most complete camouflage sets in this country. The apparatus, drawings, and models came from Washington, New York, and Boston. After the signing of the armistice, Mr. Blume proposed to give the results of the research done by the Navy Department and the Emergency Fleet Corporation to Technology. He sent the camouflage theater, models and other apparatus. Mr. William A. Mackay contributed to this set many models designed in New York. A complete assortment of the results obtained and of instructions is also due to the kindness of Mr. Mackay. The camouflage apparatus would not be reposing in the Technology buildings if Mr. Henry C. Grover had not given orders to that effect.

Professor Peabody invites any one interested to visit the camouflage room. The visit must be made under the personal supervision of Professor Peabody, so only one or two are asked to come at one time.

HOW THE BOYS IN FRANCE SPENT CHRISTMAS

Other news of the A. U. U. and the Tech Bureau

The following is George Gibbs's account, received too late for the April "Review," of the Tech Bureau's Christmas dinner. There is also the first news we have had to date of M. I. T. men at the American University Union in London.

THE annual Christmas party of the Technology men in France was held at the Cafe Cardinal, Boulevard des Italiens, on December 21, 1918.

The following men were present: Hoffman Kennedy, '05, W. A. Hall, '88, John Lunn, '17, Tenney L. Davis, '13, George C. Gibbs, '00, W. W. Dodge, '16, Paul Buxton, '16, Raymond B. Haynes, '13, C. E. Fox, '14, A. W. Buck, '13, O. G. Norton, '15, Robert Miskowsky, '18, Kenneth Cunningham, '19, Donald R. Dixon, '14, W. N. Watson, '14, D. R. Buchanan, '18, Raymond Low, '16, James Irving, '18, J. W. Barker, '16, Guy Hill, '06, A. A. Ubelacher, '18, Francis S. Conaty, '17, Almerin Gowing, '15, Edward Y. Keesler, '17, Francis Swain, '15, D. H. McMurtrie, '15, A. R. Brooks, '17, John C. Bollenbacher, '09, Reginald Norris, '96, M. W. Pettibone, '16, Herbert W. Barrett, '18, George Sutherland, '16, C. A. Coleman, '16, George S. Stevens, '14, G. Hall, '20, Charles P. Kerr, '11, and Frederick B. Barns, '15.

Besides these, there were several guests who are frequent visitors of the Tech Bureau, among them Mr. Hooper, a mining engineer, a graduate of the University of California, also *reforme* soldier from the French Foreign Legion and Lieutenant Juttet, who during the war was an instructor at the Artillery School at Fontainebleau; among his pupils were Robert M. Allen, '16, and Fenton G. Elwell, '19. We had three other guests, also an excellent quartet from the Young Men's Christian Association; also from the Young Men's Christian Association a vocalist and his accompanist; another vocalist with an accompanist who were friends of a Tech man present, Mr. Hoffman Kennedy, '05, who lives in Paris.

The Cafe Cardinal is an excellent cafe at the corner of the Rue de Richelieu and the Boulevards, which is well arranged for a party of this kind. We had practically the second floor at our disposal. At five o'clock we held open house in a small room adjoining the dining room in which an eggnog was served. A number of men came in before dinner who were unable to attend the dinner. The dinner was held in a large and most attractive dining room, the table being arranged in the form of an elongated "T" and decorated with pine branches and red roses. It was a most cheerful sight to the boys when they came in. All were pleased that their interest and happiness were being looked out for on this side. The dinner was informal.

It was proposed by Lieutenant W. W. Dodge, '16, that after demobilization and the return of every one a reunion of the men who have been overseas and who were present at this dinner should be held in New York.

A little feature of the dinner was a small edition of the "Treasure Chest." A large number of small and useful articles have been sent from the Massachusetts Institute of Technology War Service Auxiliary in the various trunks; these consist of knives, playing cards, cigar lighter, tooth paste, shaving cream and so forth. About fifty of these things were done up in packages and packed into a basket.

These were passed around after the last course; by this means each one received some gift from the Auxiliary through the Bureau.

Before the dinner we were pleased to receive a visit from Miss Marion Coes; '18, who came up with the Tech secretary, Miss Beakhurst, and looked in at the festivities and partook a little of our hospitality.

A gathering like this will be one of the pleasant memories of the boys who were overseas and who had the opportunity to be present.

GEORGE C. GIBBS.

The following bulletin from Paris, dated March, 1919, has been received and it clearly shows the type of work that is being done by the American University Union in Europe.

APOLOGY

Which is not an apology. The director is sorry he has let the interesting Bulletins slide, he's honestly been busy. One short Bulletin each month hereafter.

DINNERS

EACH MONTH — First Saturday at 7 P.M., Place, Restaurant "Procope," 13, Rue de l'Ancienne Comedie. Take "Metro" to Station "ODEON," on Boulevard St.-Germain and Rue de l'Ancienne Comedie is a block and a half distant.

These dinners are held regularly and at the same price — 20 francs — which includes good food, enough drinks, and some music. No formal speaking. Every Technology man in Paris should be there without fail, every Technology man passing through Paris on those dates should come. There is time for a "show" afterwards. You'll meet old friends and we'll keep up Technology traditions and its spirit.

THE TREASURE CHEST

Anything from the Treasure Chest is Free. Thank the Technology War Service Auxiliary, 491 Boylston Street, Boston, for its generosity; address, Mrs. E. C. Cunningham.

We have now — Colgate's Tooth Paste and Shaving Soap, Carborundum Stones, Corn Cob Pipes, Pipe Cleaners, Talcum Powder, some real B. V. D.'s and a few cotton pajamas, knit socks, very fine, lots of them.

AT THE "STUTE"

1944 students are now registered, and more are coming.

THE BUREAU

Don't forget to visit us whenever in Paris. Register in the Visitors' Book, see if your registration card is made or is correct. Ask for "Gibbs" Coffee or Tea in the Bureau at 5 P.M. any day.

AT PARIS UNIVERSITIES

Sorbonne: T. H. Meloy, '17; H. M. Baxter, '17; R. E. Gilbert, '19; B. C. Curtis, '17; C. L. Kingsbury, '18; E. P. Brooks, '17; I. T. Thornton, '17; F. H. Wells, '18; M. H. Stein, '18.

Ecole Polytechnique les Ponts et Chaussees: H. W. Brown, '15.

Bellevue (Fine Arts Department): W. D. Foster, '11, Adjutant and Instructor; P. L. Small, '15, Instructor; C. F. Cellarius, '16.

Among the names printed in the list of diners, whom Mr. Mower notes as Technology men, are: G. H. Butler, J. E. Huber, E. A. Keenan, C. W. Sawyer, R. P. Wilder, K. W. Akers, A. M. Baehr, E. Flood, W. E. Knight, C. R. Messenger, and G. A. Mower.

The high table blazed with notables and dignitaries, as one might judge from the following paragraph of Mower's letter:

The Lord Chancellor, in replying to the toast of "The King and President," made a very brilliant speech, eloquently expressing the high esteem in which the president and the American people are held in this country. Lord Bryce, when called upon to propose the health of the American Ambassador, was received with a perfect ovation by all our boys, and he appeared to be very much touched by this cordiality. The American Ambassador, as usual, made a very fine and dignified response. Sir Donald MacAllister, the vice-chancellor of Glasgow University, in response to the toast of the "Health of the British Universities," assured all our students that they would be welcome in every university in the country, and hoped they would be able to find much of interest while pursuing their studies on this side of the water. Dr. George E. MacLean, LL.D., formerly president of the University of Iowa, in responding to the toast of the American University Union in Europe, gave a stirring, as well as an eloquent, address which was received with great applause. He certainly knows how to talk to boys, and I think we all appreciate the work that he has done for education during his connection with the American University Union here in this country. He is now the acting director of the British Branch, and is a most fortunate choice.

PROFESSOR PARK IS SECOND TECHNOLOGY APPOINTEE

Goes with Professor Russell to Junior Plattsburg Camp to be
director of technical training

TECHNOLOGY is to be well represented at the Junior Plattsburg Training Camp this summer. Besides Professor George E. Russell, '00, who will be president and general superintendent of the camp, there will be Professor Charles F. Park, '92, professor of Mechanism and director of the Mechanical Laboratories, who will have charge of the courses in Technical Training. Lieutenant-Colonel Donald M. McRae, a student at Technology up to 1915, will be commandant at the camp.

Professor Park was graduated at Technology in 1892 and since 1894 has been a member of the faculty here, becoming a professor in 1912. Professor Park founded and has directed for the last sixteen years the Lowell Institute school for Industrial Foremen. He is chairman of Summer Course at Technology, a Fellow of the American Academy of Arts and Sciences, and a member of the American Society of Mechanical Engineers. During the war Professor Park was a member of the Committee on Education for the S. A. T. C.

PROFESSOR SAUVEUR RETURNS

Professor Albert Sauveur, a former member of the department of Mining and Metallurgy given jointly by Harvard University and Technology, has returned from France where he had charge of the section of metallurgy in the technical division of the United States Air Service.



THE CHRISTMAS DINNER OF THE TECH BUREAU IN PARIS

Gibbs at the Head of the Table



TECH MEN OVERSEAS ENJOY CHRISTMAS
Pick Out Your Classmate—as He Looks in Paris

LANSINGH SPEAKS TO WOMEN'S WAR SERVICE AUXILIARY

Praises accomplishment of women

VAN RENSSELAER LANSINGH, '98, formerly assistant director of the American University Union in Paris, told the story of his year abroad to an audience of about three hundred members of the Massachusetts Institute of Technology Women's War Service Auxiliary, Faculty and others interested in Technology in Huntington Hall, on the afternoon of April 24. He said that the city of Paris had answered the question of the future of the University Union by offering a large tract of land, centrally located, for the purpose of erecting a permanent American University club, to be the center of American university life in Paris.

The occasion of Mr. Lansingh's talk here was the closing of the Auxiliary work-room. Following his talk, a reception and tea was held at which samples of the work the women have been doing were shown.

The women who poured at the tea were Mrs. Joseph Lipka, Mrs. C. E. Locke, Mrs. A. D. Little and Mrs. H. M. Goodwin. The ushers at the lecture were Mrs. A. G. Robbins, Miss Evelyn Walker, Mrs. Bigelow and Mrs. Rollins.

Mr. Lansingh was introduced by Rev. Albert Lazenby, chairman of the War Service Committee of Technology. Mr. Lazenby paid tribute to the work of the Women's Auxiliary and thanked the women for their support. He said he would be willing to let Technology women handle any job he was connected with, in view of their splendid showing in war work. He said the Auxiliary was the greatest advertisement Technology has had. His acknowledgment of the work of Mrs. Cunningham in forming the Auxiliary was greeted with a round of applause.

Mr. Lansingh, too, was profuse in his praise of the Women's Auxiliary, saying that Technology has given more by its women than any other college.

Starting in to tell the story of his going to France, he said that the idea of the college abroad was conceived by a Yale man, Dr. Stokes. Mrs. Cunningham followed Dr. Stokes' lead and in June of 1917 arranged for the sending of Mr. Lansingh overseas.

Arriving in Paris, Mr. Lansingh founded the Technology Club of Paris, which was the first attempt of any college to establish a club in Paris. Because they were the first on the ground, Mr. Lansingh's party received a good deal of newspaper advertising, which he said was of great help to them. The club occupied seven rooms and furnished a real home for visitors, soon becoming, to use Mr. Lansingh's own words, "the center of American university life in Paris." In two months, men from thirty-five different colleges registered as guests at the club.

But to have every college maintain a club in France like Technology was doing would prove too expensive and as a result the colleges got together and formed the American University Union. At the start there were fourteen colleges in the Union. Now more than one hundred forty are contributing to the support of the project. In all, men from more than three hundred eighty-five American colleges have registered at the Union.

Mr. Lansingh said that the work was divided into two parts, first, the looking after college men, and second the educational part, that is the anticipation of a

closer relationship between French, British and Italian universities and those of America.

The Union established quarters at the Royal Palace Hotel where the needs of university men in Paris were taken care of and entertainment was furnished them. College dinners were held there, and Technology was the first to hold one of these. Mr. Lansingh spoke of the friendly rivalry that existed constantly between Yale and Technology, each endeavoring to outdo the other in social service.

General Pershing was behind the Union from start to finish, Mr. Lansingh said, assigning a man to take up certain questions with the Union officials. The problem of liquor was one of these, and it was decided that light wine and beers should be served at the Union. Mr. Lansingh said that in his period of connection with the Union, he saw only one case of drunkenness there and that man had gotten his drink outside.

Mr. Lansingh said that the Union was unique in one respect, and that was when a man entered its door, his rank "dropped off him," and to see a colonel chatting with a private was a common sight. Mr. Lansingh said this was the only place in France where this was so.

With the establishment of the Union, college bureaus were maintained in different parts of the hotel to be centers for men of the several colleges. Mr. Lansingh acknowledged the assistance of F. B. Smith, '17, of Detroit, and of R. Allen, '16, and said that his own successor, Mr. George Gibbs, '00, formerly an Episcopal minister in Oklahoma, was "the most popular man in France."

Mr. Lansingh said the Minister of Education of France was interviewed and as a result the entire French educational system was placed at the disposal of the men at the Union. Now more than ten thousand men who have had at least two years' college training in America are studying at universities in Paris. In addition to this there are one hundred fifty thousand men studying at various post schools throughout France and there are ten thousand men at the University of Boune.

Following his lecture, Mr. Lansingh showed a few slides, pictures of the Union and pictures which he got while at the Verdun and Fort Dounamont fronts on engineering work.

ACADEMY OF ARTS ELECTS SEVEN INSTITUTE PROFESSORS

SEVEN Technology professors were elected fellows of the American Academy of Arts and Sciences at the annual meeting of that organization held last Wednesday evening in Boston. Twenty-five new fellows were elected in all, raising the total membership in the Academy to five hundred forty.

The Institute men elected were: Professor Joseph Lipka, Professor William S. Franklin, Professor Arthur A. Blanchard, Professor F. G. Keyes, Professor E. Mueller, Professor E. B. Spear and Professor A. G. Woodman. Marshals Joffre and Foch and President Poincare of France were made foreign honorary members of the academy.

Professor Charles R. Cross, formerly head of the Physics Department at the Institute read a report at the meeting, concerning the Rumford fund for physical researches, of which he is chairman.

CHANGES IN THE INSTITUTE CURRICULUM

First official announcement of the work of the Faculty's reconstruction committee

THE profound changes brought about by the war have served in educational circles, as well as elsewhere, to focus attention on programs of reconstruction calculated to adapt our institutions to the changed conditions.

In many of our colleges and universities very radical changes have been deemed necessary in order that their educational programs may meet the world-wide demand for an education that will really fit young men and women to deal successfully with the complicated problems of the modern world.

The Institute, being a technical school, and always, in the nature of things, closely in touch with actual scientific and technical practice, has felt the need of radical changes less keenly than educational institutions of a different type, but it has by no means been idle in taking advantage of the reconstruction period to introduce changes intended to increase its efficiency and broaden and improve its general plan of education.

During the winter, a committee of the Faculty have been studying many of our educational problems and have embodied the results of these studies in a number of recommendations to the Faculty. In the main these recommendations are reflected in the new schedules for the various professional courses which have recently been adopted by the Faculty.

The first change that may be noted is that a new calendar has been adopted. Instead of two fifteen-week terms, there are to be two, the first of ten weeks running from October to Christmas, and a second of twenty weeks, beginning at the close of the Christmas holidays in January and running to June, with a break of a week's recess at the end of ten weeks. This arrangement will avoid the disadvantage of having a brief resumption of work after the Christmas recess only to be broken by the mid-year examinations and vacation, a time favorable for continuous and uninterrupted work.

Turning to the schedules themselves, it will be noted that trigonometry will hereafter be required for entrance, and will no longer be taught during the freshman year. This change will make it possible to begin the calculus at the opening of the freshman year, with a brief course in the fundamental principles and simple applications of the differential and integral calculus, thus starting this important subject as early as possible in the student's course. The more formal work in the calculus will come later in the first two periods of the second year, while in the third period, a course in mathematics, especially designed to train the students in the applications of the calculus to mechanics, will be given.

The entire work in mathematics at the Institute will aim, even more than in the past, to make it a thoroughly useful tool in engineering and scientific work.

In the past physics has been confined to the second year. Under the new program additional time will be devoted to the subject, and it will begin at the opening of the freshman year and continue through the second year. The increase of time has not been made with the idea of increasing the subject matter of the course, but for the purpose of devoting more time to what is given, and to make possible a more

thorough and extended treatment of those principles and methods in physics which underlie all sound engineering practice. Physics is not only fundamental for any work of a scientific nature, but it is essentially a professional subject in an engineering school, and it is believed that it will be of advantage to engineering students to begin it as early as possible in the course. Beginning the subject in the first year will also avoid a break of an entire year or more between the preparatory school physics and that of the professional school. This also should prove an advantage.

Another change to be especially noted is that the work in English and history will be carried out together with a substantial increase in the time devoted to these subjects. Certain important periods in history, both foreign and American, will be studied, not by formal lectures and recitations, but by assigned reading in the literature of the periods under consideration, by informal oral discussion, and by written reports based on the reading and discussion. By such means it is felt that a greater and keener interest will be aroused for the study of history than by more formal methods of instruction, and that a clearer insight into the meaning and interpretation of history may be achieved. At the same time the power to use correct and effective English to express one's self will be more easily and quickly acquired by reason of having topics of real and compelling interest upon which to practice the art of expression. Work of this nature will naturally tend to broaden the student's outlook and focus his attention upon affairs of life outside of its purely professional side. With this same important aim in view, the amount of time devoted to political economy has been doubled and a substantial increase of time is assigned to elective general studies in the third and fourth years. A carefully chosen group of courses in literature, English and foreign history, business and economic subjects, and in general science, will be offered as electives and this list may be extended in the future.

For some time there has been a strong feeling among the alumni and Faculty that a greater amount of attention should be paid at the Institute to what may be called broadening and humanitarian studies in the belief that, however accomplished a man may become in technical or scientific lines, without an ample background in the so-called humanities, and without the ability to express himself clearly and effectively, his usefulness to society and his chance of attaining a full measure of success in his profession, or in life in general, is sure to be much lessened. It is in an effort to equip all Institute men with such a background, and prevent too narrow a training, that the changes in English, economics and general studies alluded to have been made.

Foreign languages will be no longer required in the first and second years, except in certain courses, such as chemical engineering, where a use of technical literature in foreign languages is a necessary part of the professional work.

A substantial reduction has been made in the number of hours of exercise as compared with hours allowed for preparation in nearly all of the professional courses. A large number of changes will also be made within certain professional subjects, with a view not only of improving their absolute value but in order to correlate them more closely with dependent work.

Provision has been made for admitting a junior freshman class in January of next year, as has been done this year and last. If this proves satisfactory it will be made a permanent policy.

Military training will be continued through the second year, for three hours a week, and provisions will be made in the schedules of several of the engineering courses for special work for men desiring to take advantage of the opportunity offered by the War Department for specially qualified and trained men to enter the engineering service of the army through the Reserve Officers' Training Corps.

FACULTY PROMOTIONS AND CHANGES

At the June meeting of the Corporation of the Institute of Technology the following were elected Term Members of the Corporation to serve for five years (until June, 1924):

Henry A. Morss, '93
James F. McElwain, '97
Merton L. Emerson, '04

The retiring members are Messrs. F. H. Fay, F. W. Hobbs, and Gerard Swope, whose terms expired in March, 1919.

The Corporation also voted upon the following promotions and changes in the instructing staff for the next school year:

TO THE GRADE OF PROFESSOR:

Associate Professor C. W. Doten to Professor of Political Economy.

TO THE GRADE OF ASSOCIATE PROFESSOR:

Assistant Professor H. C. Bradley, '91, to Associate Professor of Drawing and Descriptive Geometry.

Assistant Professor F. E. Armstrong, to Associate Professor of Political Economy.

Assistant Professor C. E. Locke, '96, to Associate Professor of Mining and Ore Dressing.

Assistant Professor N. C. Page, '02, to Associate Professor of Electricity.

TO THE GRADE OF ASSISTANT PROFESSOR:

Instructor J. B. Babcock, '10, to Assistant Professor of Railroad Engineering.

Instructor S. A. Breed, '93, to Assistant Professor of Mechanical Drawing and Descriptive Geometry.

Instructor L. F. Hamilton, '17, to Assistant Professor of Analytical Chemistry.

Instructor H. B. Luther, '08, to Assistant Professor of Civil Engineering.

Instructor C. S. Robinson, '09, to Assistant Professor of Industrial Chemistry.

Instructor R. H. Smith, to Assistant Professor of Mechanical Engineering.

Instructor C. E. Turner, '17, to Assistant Professor of Biology and Public Health.

Instructor A. F. Holmes, '04, to Assistant Professor of Theoretical and Applied Mechanics.

TO THE GRADE OF INSTRUCTOR:

Assistant C. H. G. Gray to Instructor in Electrical Engineering.

Assistant F. C. Hoyt to Instructor in Physics.

Assistant Max Knobel to Instructor in Physics.

Assistant C. E. Lansil to Instructor in Electrical Engineering.

Assistant A. L. Russell to Instructor in Electrical Engineering.

Assistant C. E. Tucker to Instructor in Electrical Engineering.

Assistant E. E. Richardson to Instructor in Analytical Chemistry.

Assistant S. G. Simpson to Instructor in Analytical Chemistry.

Assistant P. O. Yeaton to Instructor in Mechanical Engineering.

APPLIED CHEMISTRY LABORATORY

The Department of Chemistry at the Institute probably had more professors in various kinds of war service than any other department, and during the war

the teaching and laboratory staff was short-handed and overworked in consequence of the number of members of the faculty holding important posts both here and abroad.

With their return to duty, however, this spring, for the summer term, the chemical work, particularly the Laboratory of Research in Applied Chemistry, will reopen with its former strength. The Research Laboratory will again be under the direction of Professor, formerly Colonel, William H. Walker, Ph.D., who was Chief of the Gas Defence work at the Edgewood Arsenal in Washington, and whose labors made the American army the equal if not the superior of any European army in the problems of gas offence and defence by the time the armistice was signed. Professor Walker will be surrounded by an able group of research chemists, most of whom have seen important service along their specialized lines during the war. The staff of the laboratory is as follows:

William H. Walker, Ph.D., Director of the Laboratory and Professor of Chemical Engineering. He has been in the service of the War Department since the fall of 1917, but returned to the Institute on June 3.

Warren K. Lewis, Ph.D., '05, Professor of Chemical Engineering.

William H. McAdams, B.S., S.M., Assistant Professor of Chemical Engineering, beginning April 14, 1919.

Robert E. Wilson, Ph.B., S.B., Assistant Professor of Chemical Engineering and Assistant Director of the Research Laboratory of Applied Chemistry, beginning March 15, 1919.

Kenneth E. Bell, '17, Research Associate in Applied Chemistry, beginning June 2, 1919.

Everett W. Fuller, B.A., M.A., Research Associate in Applied Chemistry, beginning February 15, 1919.

William G. Horsch, S.B., M.S., Ph.D., Research Associate in Applied Chemistry, beginning April 1, 1919.

Leon W. Parsons, S.B., A.M., Ph.D., Research Associate in Applied Chemistry, beginning March 1, 1919.

William B. Ross, B.S., Research Associate in Applied Chemistry, beginning March 15, 1919.

Charles S. Venable, A.B., M.A., Ph.D., Research Associate in Applied Chemistry, beginning April 14, 1919.

Thomas M. Knowland, S.B., Research Assistant in Applied Chemistry, beginning March 1, 1919.

Stanley L. Chisholm, S. B., Half-time Research Assistant in Applied Chemistry, beginning May 15, 1919.

Merrill A. Youtz, A.B., Half-time Research Assistant in Applied Chemistry, beginning March 1, 1919.

APPOINTMENTS

R. R. Chamberlain, Instructor in Physics.

Thomas Derr, '19, II, Instructor in Physics.

Raymond Douglass, Instructor in Mathematics.

A. S. Hardy, Instructor in Physics.

Ralph Morris, Instructor in English.

Charles R. Park, Instructor in Theoretical Chemistry.

Dr. James S. Taylor, Instructor in Mathematics.

Bailey Townshend, '16, VII, Instructor in Physics.

Dr. Norbert Wiener, Instructor in Mathematics.

C. M. Wareham, '16, XI, Instructor in Inorganic Chemistry.

C. E. Turner, '17, Instructor in Public Health Administration in the School of Public Health.

Miss Charlotte S. Alling, Research Assistant in the Chemistry of Foods.

Miss Dorothy Bell, Librarian, Vail Library, beginning June 2.

Kenneth E. Bell, '17, X, Research Associate in Applied Chemistry, beginning June 2, 1919.

Stanley L. Chisholm, '17, V, Half-time Research Assistant in Applied Chemistry, beginning May 15, 1919.

T. E. Shea, '19, VI, Research Assistant in Electrical Engineering, beginning June 23, 1919.

RESIGNATIONS

Miss Helen Almy, Librarian, Vail Library, effective June 1.

A. F. Murray, '18, I, Research Assistant in Electrical Engineering, effective May 15, 1919.

A. A. Prior, Research Assistant in Electrical Engineering, effective May 24, 1919.

REAPPOINTMENTS

A. B. English, Instructor in Machine Tool Work.

D. A. Fales, '15, II, Instructor in Mechanical Engineering.

F. M. Gracey, Instructor in Freehand Drawing.

W. J. Hauser, '14, IV, Instructor in Mechanical Drawing and Descriptive Geometry.

M. P. Horowitz, '16, VII, Instructor in Biology.

Walter Humphreys, '97, Instructor in Mechanism.

C. N. Jacobs, '15, X, Instructor in Inorganic Chemistry.

A. S. Jenney, '83, Instructor in Architecture.

W. H. Jones, '09, II, VI, Instructor in Mechanical Engineering.

F. M. Kanaly, Instructor in Physical Training.

J. R. Lambirth, Instructor in Forging.

C. E. Littlefield, '95, Instructor in Chipping and Filing.

J. C. MacKinnon, '13, VI, Instructor in Physics.

J. F. O'Neill, '02, Instructor in Woodwork and Foundry Work.

R. G. Overland, Instructor in Mechanical Drawing and Descriptive Geometry.

N. S. Marston, '11, VI, Instructor in Electrical Engineering.

R. D. McIntire, '18, V, Instructor in Inorganic Chemistry.

H. H. Palmer, '09, Instructor in Physics.

Dean Peabody, Jr., '10, II, Instructor in Mechanical Engineering.

R. C. Reed, '04, Instructor in Mining Engineering and Metallurgy.

C. W. Ricker, '14, VI, Instructor in Electrical Engineering.

K. C. Robinson, '12, II, Instructor in Mechanical Engineering.

C. A. Rogers, '17, II, Instructor in Mechanical Engineering.

George Rutledge, Instructor in Mathematics.

F. H. Slack, Instructor in Public Health Laboratory Methods.

D. M. Taylor, '06, II, Instructor in Mechanical Engineering.

C. H. Walker, Instructor in the History of Ornament.

W. G. Whitman, '17, X, Instructor in Industrial Chemistry.
 P. W. Norton, '08, IV, Part-time Instructor in Architectural Engineering.
 Joseph Kaufman, '19, VI, A, Assistant in Electrical Engineering.
 Miss I. D. Loring, Assistant in Architecture.
 H. C. Priest, '19, VI, Assistant in Mechanical Engineering.
 H. F. Reed, '18, II, Assistant in Mechanical Engineering.
 James M. Strang, '19, VII, Assistant in Biology and Public Health.
 D. S. Piston, Half-time Assistant in Physics.
 C. K. Rathbone, Half-time Assistant in Drawing.
 Miss Ruth M. Thomas, Research Associate in Organic Chemistry.
 Charles R. Gow, Lecturer on Foundations.
 Eliot Putnam, Lecturer on Architectural History.
 Dean Peabody, Jr., '10, II, Lecturer on Reinforced Concrete.
 F. L. Schaub, Lecturer on Business Law.
 Arthur C. Melcher, '00, Purchasing Agent of the Chemical Department.
 Elof Benson, Curator of Apparatus and Assistant in Physics.
 Carl Selig, Constructor of Apparatus and Assistant in Physics.
 Ralph G. Adams, '11, II, Instructor in Mechanical Engineering.
 W. P. Blood, Instructor in English.
 Francis R. Brown, Instructor in Forging.
 R. C. Burnham, '00, Instructor in Mechanical Engineering.
 Evers Burtner, '15, XIII, Instructor in Marine Engineering.
 C. H. Clark, Instructor in Mechanical Engineering.
 M. R. Copithorne, Instructor in English.
 I. H. Cowdrey, '05, Instructor in Mechanical Engineering.
 W. A. Crosby, '17, IV, Instructor in English.
 Myron W. Dole, '04, Instructor in Mechanical Engineering.
 J. J. Eames, '02, Instructor in Mechanical Engineering.
 W. C. Eberhard, '14, I, Instructor in Mechanical Drawing and Descriptive Geometry.

APPOINTED FOR TWO YEARS LAST YEAR

TO CONTINUE THIS YEAR

W. R. Barss, Instructor in Physics.
 F. L. Hewitt, Instructor in English.
 F. R. Kneeland, Instructor in Organic Chemistry.
 C. H. R. Mabie, Instructor in Mechanical Drawing and Descriptive Geometry.
 Winward Prescott, Instructor in English.
 Penfield Roberts, Instructor in English.

WANT COURSE IN AERO ENGINEERING

A PETITION for the purpose of establishing at Technology a complete undergraduate course in Aeronautical Engineering has been circulated among the students, and presented to the faculty. Considerable enthusiasm was apparent among the twenty-odd men who were present at a special meeting. It has the backing of Dean Alfred E. Burton and Professor Parks of the faculty.

FIVE YEARS OF TECH SHOW

AT the Tech Show dinner held this June after the successful performances of "A Doubtful Medium" I said to the boys, in substance, this: "The Tech Show has now proved itself, proved itself valuable for its own sake. For a long time it was looked upon too much, perhaps, as a means of making money for the Technology athletics, and as a means tolerated by those, alumni and instructors, who saw no good in it for its own sake. But today athletics does not need the Tech Show's money. It can get along perfectly well with its share of the student tax. The fact that the Show could send a thousand dollars last year to the American University Union shows that conclusively. Furthermore the standard of accomplishment of the Show for the past few years has made it valuable as an end in itself, as a vital thing in the training of those men who go out for it. Henceforth the energy should be put, not into making money, but in making the Show the best in America."

I wish to amplify this a little for the alumni.

I have seen five Tech Shows, been fairly closely connected with them, seen them develop from the protozoa of incomplete scenarios, through the tadpole stage of hectic dress rehearsals to the complete vertebrates of the alumni performance. My biology may be wrong but my memory is right. And I have seen in the last five years a continuous increase in intelligent experimentation, in better ideals and in professional standards. The old Tech Show was like the old college show everywhere, a pretty unintelligent and flat imitation of old-style musical comedy. But while other college organizations of the sort, such as the Pudding and the Pi Eta at Harvard, for instance, have been sticking pretty closely to the same old thing, the Tech Show has been quick to catch on to the new type of quiet, well-bred, "intimate" musical play, for which some unusually well-fitted talent was found at the Institute. The first urge towards novelty came with "M34" in 1916, which, although not entirely successful in some of its working out, was animated by a good idea, that of a "revue," and was notable for costumes and scenery, designed and made by the students, which set a new standard of beauty for the Show. There, for the first time, we saw Joe Gardner and Johnny Coldwell, in the ballet which was to be Technology's one great contribution to undergraduate musical comedy.

The next Show, "Not a Chance," in 1917 saw dancing that I have never seen bettered on a professional stage; Miss Virginia Tanner's elaborate oriental ballet of the Dawn, with Gardner, now a captain overseas, as the Mordkin of the piece, and one or two as unusual solo pieces also by Gardner. The production was too heavy and too expensive, too many scenes and too elaborate, but those who remember the Chinese wall set, the rose-window drop in the new manner for Gardner's "pas seul," or the last scene, will acknowledge the ability of Tech's scene designers.

Last year, 1918, in "Let 'Er Go!" saw an old favorite in a new role, Walt Frazier in his impersonation, "Vamping on the Great White Way," as poised, richly humorous yet reticent, and polished an impersonation as you could see on any professional stage. Frazier repeated his success this year in a similar impersonation, "Oh, what a life while it lasted!"—if anything, funnier. And both years his power for that sort of impersonation was set off by the extraordinary sweetness and charm—those are the only words for it—of little Freddy Britton in his ingenue roles.

But what makes or mars a musical piece is the music, and in that we have had

in five years two men with unusual ability as music writers, one, Earl Collins, who seems born under the Jazz star, and Bill Hedlund, whose solid musical training in the classics has enabled him to write music, particularly orchestral music, far above the usual thing in college shows.

Now I have been speaking, not of those things that were merely good, clever, pleasant, but of those features of the past Tech Shows which have been absolutely first class judged by whatever standard you please, and which show what good work engineers can do in the difficult and unfamiliar field of Art. For these things WERE Art—Art with a capital A—within my experience unequalled, and I have had to do with a good many undergraduate theatricals in a good many schools. The scenery and costumes of 1916 and 1917, the Dawn ballet and the Primitive ballet of 1917 and 1919, the music, written and played, of all the last four years, the character impersonations of Frazier, the unaffected appeal of Britton's acting, and finally, and not least, the complex, articulated competence of the business management—these are not to be beaten anywhere and should, if their real value is properly seen, "clinch the precedent," as Prexy Eliot once said, for Tech Show.

I have written before in this magazine of the unequalled value for college men, even in a place like Tech, of "organized and productive leisure." That is what a good activity should give. That is what Tech Show gives better, and for a larger number of men, than any other one Institute activity. It employs over a hundred men, more than any except athletics. It gives them a chance to specialize in a dozen different ways, in writing, both lines and music, acting, playing in the orchestra, scene designing and painting, lighting, stage managing, ad getting, program publishing, publicity, accounting and bookkeeping, and finally—at the top of the list—executive management of a very advanced sort. And all these men are urged and made effective by the thought that they are doing something solid and concrete, a work of art—whether they think of it in that way or not—which will have to be judged by large and critical audiences and will have to face the comparison not only with other college shows, but with professional productions.

The result is that the hundred men who have used their leisure in this way have gotten something out of it which will be of value in the outside world. They have mixed and worked and fought and compromised and accomplished with other men; they have had a taste of what it means to put through something big and actual; they have learned something about production engineering. And that training, if I were those men, I would not exchange for any number of credit marks gained by unremitting and solitary study.

But the value of it goes deeper than that. My last paragraph applies largely to the business force, to the technical end of the Show. What of the actors, the playwrights, the musicians, the dancers? This! Long ago, as G. K. Chesterton tells us, everybody sang in a chorus. Nobody did it well, but all did it. Today the crowd sits still and listens to the expert sing, because he alone can do it supremely well. The next step, he thinks, would be to have our noses blown for us by experts. In other words, between the business man or engineer and the artist there is a great gulf fixed, the gulf of professionalism. The engineer despises the professional artist, as a result, the writer, the singer, the actor, painter, entertainer—and the artist has no words at his command to express what he feels about the engineer. The result is the present state of our literature, art, stage and music—in short, of our civilization. For these things are the essence of civilization.

Now any man who has written, acted, danced or sung in Tech Show has, in ever so little a way, bridged that gulf, and helped take the curse off Art—as the engineer thinks of it. He has learned to do something he never knew how to do before,

a difficult, a subtle, a taxing thing, and has learned that when he can do it well enough people enjoy it and respect him for it. If you do not believe it, ask any man, any average Course II man, who has been seduced into going out for the *Masque of Power* in 1916, the *Dawn Ballet* in 1917 or the ballet of this year, and has been trained by Miss Tanner to do genuine, difficult, athletic ballet dancing, and who made one among the many in those three splendid spectacles. He will back up what I say. And any one who saw either of those three visions of beauty and strength and art, either on the stage or in the Great Court on that June night three years ago, will, I think, upon reflection agree with me.

Now that is the lasting contribution of Tech Show to the lives of those men who take part in it. To one group it gives a training in the careful and proper management of great enterprise; to the other group it gives that far more important thing, some sense that art and literature and drama and music can be made part of the life of the average business man, are not isolated professional things, and in a decent civilization would not be isolated, professional things. In other words, the Tech Show gives them *IN ACTION* the worth of a dozen courses in the fine arts, music and aesthetics in general. It is a pragmatic liberal education. It is the only place in the Institute where most of them get that liberal education, outside of Course IV. And it is only too often the only thing in all their lives that gives them a sense of what aesthetics is and its place in our daily lives.

And that is why, student tax or no student tax, profit or no profit, the Tech Show has made a permanent place of necessity for itself in the unofficial curriculum of the Institute and deserves all the encouragement and hard work that can be given it. For the last five years of achievement have made it not a means but an end.

R. E. R.

THE FUTURE OF GAS

As pointed out by Colonel William H. Walker, who is better known as the Director of the Course in Chemical Engineering at the Massachusetts Institute of Technology, gas warfare is effective, largely because the troops that are subjected to continued exposure to gas and, therefore, have to wear their masks for several hours, lose a great deal of their efficiency, even to the extent of rendering it necessary to remove them from the gassed areas. It was the heavy gassing of the back areas, and particularly of the reserve troops back of the British front lines, resulting in loss of efficiency among those troops due to their having to wear gas masks, that contributed so largely to the German success in the great drive of March, 1918. And the slowing up of that offensive and its ultimate loss of driving power were due largely to the fact that the Germans ran out of gas.

If these facts are well established, and they rest upon the highest authority, it becomes a question whether prudence and farsightedness do not suggest the maintenance of our great gas factory at Edgewood Arsenal as a permanent military asset of the country. If a small force, sufficient to care for the plant, were maintained there, we should have at hand, capable of immediate operation, a military asset far exceeding in its potentialities anything of the kind in the world today.

THE FINANCIAL ADMINISTRATION OF EDUCATION

The real position of college trustees in regard to their institutions

We reprint from a recent issue of "School and Society" an article by Professor L. M. Passano of the Institute, a very timely article in view of the present financial position of Technology, and one which should interest both those alumni who are serving on the Corporation and all others who have at heart the permanent interests of the school.—Ed.

AMID the accumulation of criticism, suggestion and complaint in reports of investigations of the productive department of the educational establishment, it is perhaps timely to search for a few facts and to raise a few questions about the administrative branch. In other words, when the productive workman of the college, the teacher, is accused of inefficiency or failure along all the lines of his work — admission to college, time schedules, content of courses, testing and grading of students, aims and ideals in education — it may be well to ask whether the administrative, the financial officers of the college are so conducting their department as to be absolved from criticism or reproof.

With possibly a few exceptions the American college is notoriously poor, penurious, and is being operated with insufficient capital and funds. This condition of affairs is in no way the fault of the workmen — teachers and students. The former work for low wages and the latter pay a high apprenticeship fee. Nor, in any case, is the workman supposed to be directly concerned in the financial management of an establishment. The trustees or regents are the financial managers of the college and their first concern, unless they are mere dummy directors, should be to provide ample capitalization — without water — and sufficient working funds. The financial head of a business does not merely provide for the proper expenditure of what capital there is, but has the far more important duty of providing the working capital that is necessary to the proper conduct of the business.

The workman, the teacher, is notoriously underpaid. To be a successful accumulator of wealth no education beyond that of the grammar school would seem to be essential. To be a successful college teacher there is needed in addition four years of high school and six or eight years of college and university training; in all ten to twelve years of special training for an occupation which pays a man at thirty years of age, on the average, a salary of twelve hundred dollars per annum. And, it must be borne in mind, during this period of training the prospective worker, the teacher, pays into the college a sum of, say, one thousand to twelve hundred dollars; an investment on which the interest is certainly not compounded. Truly the financial embarrassment of the colleges cannot be attributed to the high wage paid the workman.

It may be objected that the directors of the educational corporation are not paid, and that like the directors of any — or any other — charitable, non-productive institution their responsibility rests entirely in administering the funds of the institution and in no way is concerned in the provision of funds or capital. Both of these statements are open to denial. The trustees of the educational corporation

— whether private or state endowed — are paid, not in money, indeed, but in social prestige and honor; and indirectly in economic values. The positions they hold enhance their standing in the community, bring them into the eyes of the public and increase the number of their opportunities to hold fiduciary positions which do pay directly and economically. The educational trusteeship, whether for a lawyer, a banker or a capitalist, is a business advertisement; the only kind of advertisement often that professional etiquette allows them to have. Moreover there are instances in which trustees endeavor to make their positions of more direct economic value. For cases are known in which, it is said, the trustees have endeavored to force the teaching of economic doctrine directly favorable to their private business investments, and to suppress the teaching of doctrine, sincerely believed to be conducive to the welfare of the community as a whole or of large classes of the community whose interests are supposedly in opposition to those of the class to which the trustees belong.

In the second place, in spite of assertions to the contrary, neither the educational institution itself nor any institution concerned in bettering the lot of the teacher, is in any sense a charitable institution; and, moreover, the educational institution is productive in the highest sense. The teacher is paid for valuable and strenuous labor in producing a "commodity" of supreme importance, not only to the young man or woman being educated, but also to the community of which they are to become citizens. This being so it is the duty — a duty for which they are compensated — the *duty* of the trustees to provide ample funds and capital for the productive enterprise whose finances are entrusted to their care.

The trustees of the educational corporation have been derelict in their duty of providing capital and working funds, unwise in the expenditure of funds provided, deficient in judgment in making contracts, and unfair in the treatment of the workman of the trade. The first of these four assertions needs no proof. Most of the educational institutions of the country are embarrassed, some are desperately poor, and some on the verge of bankruptcy.

The second assertion is not so obviously or generally true, but is supported by this evidence: The educational institutions, for the most part, are competing for numbers. Growth in the number of students and ability to hold the number in spite of adverse conditions are the criteria used in judging of the success of an enterprise which, in any case, is run at a loss, and in which increase of product is said to be accompanied by increase in deficit. The management of a commercial enterprise under such conditions would concentrate its attention and effort upon a reduced product of higher value; upon quality of product, not quantity. The workmen — the teachers — of the college are, in general, opposed to this policy of numbers. They prefer a high-grade product in smaller quantity, rather than a large quantity of low-grade goods. This preference is partly due to selfish motives, because there is more pleasure in producing a thing of high value and of perfection, and to do so requires not less but more skillful and interesting labor. The teacher recognizes also that the high-grade product is much more valuable to the community. In this the motive is unselfish.

In this connection it would be interesting to compare the increase of administrative salaries and wages with the increase of productive salaries and wages in educational institutions throughout the United States. The following approximate figures are available for a typical institution.

Increase in total annual expenditure, wages and salaries, for teaching (not including research and special lectures) about two per cent.

Ditto, including research and lectures, seven per cent.

Increase in average annual salary (not including research and lectures) seventeen per cent.

Ditto, including research and lectures, twenty-five per cent.

Increase in total annual administrative wages and salaries, including wages accessory to teaching, fifty-two per cent.

Ditto, not including wages accessory to teaching, twenty-nine per cent.*

The second assertion (unwisdom in expenditure) is supported also by the methods and results of a corporation founded for the advancement of teaching. The Carnegie Foundation is — or was — in no sense a charitable organization. Its system of retiring allowances and pensions was a deferred payment of wages earned by severe and arduous labor. This corporation has been so managed as to be compelled, it says, to abrogate its moral contracts by the substitution of legal contracts of an entirely different nature. Instead of pensions as a deferred payment of wages earned are substituted life insurance and annuities to be compulsorily paid for out of wages already too meager for decent living. The reason for the change is that the corporation which assumed the moral contracts has become, or was about to become, bankrupt. The corporation has apparently more than sufficient funds to fulfill its existing obligations, but instead of so doing it repudiates them, partially or wholly, and asks the holders of the repudiated contracts to trust it — the corporation — under a new name to fulfill a new species of contract in the making of which the holder has no voice or choice, and in a company in whose management the holder has no share. In the meantime the funds of the semi-bankrupt corporation have been used, in part, in paying for the collection of futile data and the publication of useless reports on the productive department of the educational institution. A commercial corporation under such conditions would be compelled by law to liquidate its existing obligations before undertaking new ones, and the management and methods of the old company would be closely scrutinized before its directors were permitted to float its new certificates. Moreover, the worst feature of the proposed new company and its contracts is the insidious evil underlying them. If they should be universally or generally accepted the Carnegie Foundation would get control, almost absolute, of the entire system of higher education in the United States and Canada. It is commonly believed that the foundation has always had this aim, and it is seen that the new insurance and annuity company is a powerful and insidious means of attaining it. But the world at present has lost all trust in despotisms, however benevolent.

The foregoing remarks support, also, the third assertion made above, that the trustees of the educational corporation have been deficient in judgment in making contracts. This assertion is also supported by the present condition of a number of educational institutions as a result of the cancellation of contracts made with the federal government in connection with the Students' Army and Navy Training Corps. Many corporations entered into contracts with the government for war-time production. Those which were wisely managed made arrangements at the same time for a return to peace-time production. The sudden return of peace conditions left a number of educational institutions helpless derelicts upon financial waters, and left all educational institutions in a state of fear and panic. The criticism that would be made of a commercial enterprise so mismanaged could be equally well applied to the educational enterprise.

Some instances in support of the fourth assertion, that the treatment of the worker in the educational institution has been unfair, have already been adduced.

*Expenditures for operation and maintenance of plant are not included in the above figures.

There are others. Wages in all occupations have greatly advanced. Wages of teachers have remained almost, and in some cases, entirely stationary. There has been much overtime work in all occupations, and overtime has been paid for as time-and-a-half or double time. An enormous amount of overtime work in teaching has been done, for the most part without pay and never, as far as any information is available, at advanced rates. Cases are known of pay for extra time at less than the current rates but never a case, it may be asserted, of double pay or time and a half.

In this matter, however, the teacher does not stand upon his rights. For many reasons — patriotism, pride in his profession — he is willing to forego what other wage earners demand as a right, but he is justified in counter-criticizing the financial management of an institution which permits such conditions to exist. He knows, of course, that the trustees can expend only the funds which they have, but he asserts that it is part of the duty of the financial management to supply the needed funds. He, the teacher, knows also that such funds must be supplied ultimately by the whole community, by the people as a whole. Even if the funds are a direct gift from those able to give because of superabundant accumulation of wealth, it is the community in the end which is the donor, because it is the community as a whole which has given the wealth to the individual, sometimes with, sometimes without an adequate reciprocal service. Or it may be that the community contributes in the form of government appropriations which the whole community pays in the form of taxes. If the "federal government was willing to spend two hundred million dollars in one year on education . . . because the national need was great" in time of war, there is no reason why the state and federal governments — that is, the whole American people — should not spend double that amount in time of peace when the national need is greater; when the need is not so immediate and imperative, perhaps, but is more important and enduring.

The financial management of the educational corporation should learn, then, first of all, the real importance of education to the individual and to the community. It should, in the second place, understand that it is the duty of the management to convince the public of this importance; should see to it that the public understand that it is being offered the very best investment for its money. Finally, the directors should clearly see that the first duty of the management is not so much the wise expenditure, as the liberal provision of funds. The workman of the educational factory will do the work cheerfully and willingly, but he has a right to expect that those in charge should see to it that the enterprise is properly financed. Let this be done, hold in abeyance captious criticism of the workman, and give him a chance to show what he can accomplish with adequate pay under favorable working conditions.

LEONARD M. PASSANO.

DEAN BURTON'S SON RETURNS WITH A BELGIAN DECORATION

HAROLD H. BURTON, son of the Dean, has arrived from overseas. He was a captain in the 361st Infantry, a part of the 91st, the "Wild West" Division. He took part in the fighting in the Argonne region, and is a winner of the Belgian Croix de Guerre. Captain F. Arnold Burton, '00, Course IV, the Dean's other son, is now military attache at the Hague, and is expected to return shortly.

IS THE INSTITUTE ON THE DEFENSIVE?

Are our methods out-dated? The Carnegie Foundation awards the palm to the University of Cincinnati—the co-operative system of engineering education

From the Cincinnati Enquirer

CO-OPERATIVE system of education for engineering students as originated and established in the University of Cincinnati by Herman Schneider, Dean of the Engineering College, has been declared the best of all systems in America by the Carnegie Foundation for the advancement of teaching.

More than three years ago the leading engineering societies of America requested the Carnegie Foundation to appoint a man trained in applied science, who would be able to give his entire attention to the investigation of the engineering colleges in America. The foundation agreed to appoint such a man and bear the expense of the study.

Professor Charles R. Mann, of the University of Chicago, undertook the work, and the results of his investigation have just been published by the Carnegie Foundation.

At the same time the British government sent Dr. Herbert Branston Gray, cousin of Sir Edward Gray, and secretary to the Royal Commission on Taxation, British Columbia, as a representative of the British government, to study the co-operative plan at the University of Cincinnati, with the view of establishing such a system in England.

Dean Schneider came to the University of Cincinnati from Lehigh University in 1903. At that time the University of Cincinnati had a small engineering college. In 1906 Dean Schneider inaugurated the co-operative plan of education.

This plan permits the students taking the engineering course to attend college two weeks and then work in the shops for two weeks. By this method the student is able to earn enough money to pay in large part his way through college, and at the same time receive practical engineering experience.

When Dean Schneider adopted this plan of education he was criticized by the leading educators of the country. He was termed a "faddist in the educational world."

The educators even went so far as to predict the failure of Dean Schneider's revolutionary measures in education.

Now, approximately ten other universities throughout America, besides a large number of preparatory and high schools, have adopted the Schneider method of education. It has been due largely to the co-operative system that the University of Cincinnati is known throughout the world.

The report of the investigation says that Dr. Mann took twenty of the leading engineering schools of the United States as good examples of the educational system relative to engineering in America. The colleges were the following:

The United States Military Academy, Rensselaer Polytechnic Institute, Massachusetts Institute of Technology, Stevens Institute, Carnegie Institute of Technology,

Columbia University, Tufts College, Worcester Polytechnic Institute, Virginia Polytechnic Institute, Purdue University, Pennsylvania State College, Cornell University, Sheffield Scientific Institute, University of Pennsylvania, University of Virginia, University of Pittsburgh, University of Illinois, University of Wisconsin, Ohio State University and University of Cincinnati.

Dr. Mann, in his report to the Carnegie Foundation, gives a short description of Dean Schneider's co-operative plan. He says:

"The Cincinnati plan was first formulated by Dean Schneider in 1899, when he was instructor in civil engineering at Lehigh University. In 1902 Dean Schneider presented a full statement of his scheme to the directors of several large industrial institutions which were considering the establishment at Pittsburgh of a new technical school.

"This plan was to give an engineering training that would be better suited to industrial needs than that given in the engineering colleges. This plan was abandoned when Mr. Carnegie founded the Carnegie Institute of Technology in the city of Pittsburgh.

"Finally, in 1906, Dean Schneider found an opportunity to make his experiment at the University of Cincinnati."

A description of the work and the working plan of the Engineering College, University of Cincinnati, is taken up in detail by Professor Mann.

"The curriculum is complete in five years of eleven months each, so that the student receives twenty-seven months of university instruction and twenty-seven months of industrial work," Professor Mann says. "The graduates of Cincinnati have unquestionably as extensive training in theory as those of other first-class schools.

"In addition the Cincinnati graduates are able to command positions as graduates without one or two year 'apprentice' courses such as are required of men from other schools by a number of large corporations.

"Approximately one hundred of the industrial firms of Cincinnati and vicinity now are co-operating with the university in this work. These firms represent every important phase of engineering, so that the university is able to arrange the work schedules in such manner that each student progresses regularly through every phase of his specialty.

"Financially, the co-operative plan is economical, both for the university and for its students. The university has access, without expense, to shops and shop equipment that are worth millions of dollars, and are never allowed to deteriorate or become antiquated."

The financial advantages of the "Schneider plan" also are set forth by Professor Mann. The Carnegie Foundation also reports that the co-operative plan is much better than to have the shops in the college without access to the industrial plants.

Dr. Mann speaks of the educational advantages of the Cincinnati co-operative course at such small cost. He says:

"With such rich opportunities for education lying plentifully about in industrial plants, it is a striking anomaly that the schools make so little use of them. The situation is all the more impressive because the co-operative use of industrial plants results in a large reduction in the cost of schooling and gives the student a chance to support himself partially in college."

Professor Mann, speaking of the internal workings relative to the faculty, said:

"If the Cincinnati plan has proved stimulating to the students, it has been revolutionary for the faculty.

"The co-operative type preserves one of the main advantages of the military

type in that its jurisdiction extends within the departmental boundaries. Since it uses this jurisdiction not for autocratic control, but means of converting government by the majority vote into a community of effort for the students' good, it also possesses another of the effective factors of the military type, namely, homogeneity of action.

"When skillfully organized, as at Cincinnati, the engineering faculty is a co-ordinating center for the entire engineering curriculum. Nor does it appear to have lost any of its nominal advantages of the autonomous-department type in the way of personal freedom of its members and inspiration for creative work."

In most of the colleges of the country departmental autonomy is in vogue. In fact, the Liberal Arts College of the University of Cincinnati still operates under this plan.

The autonomy plan gives the head of each department complete charge of arranging all courses and power to tell what every class should study in his department.

Dean Schneider abolished this in the engineering college as soon as he was appointed dean. In the engineering college at the university the faculty meets every week and decides as a body just what each department shall teach.

The critics in years past of Dean Schneider's plan are recalled also in Professor Mann's report. He tells how the educators scoffed at the plan. He says:

"Because the educational conceptions on which the Cincinnati plan is founded are so different from the currently accepted conceptions of school practice it has taken some time for other schools to recognize the significance of the venture.

"The scheme was scoffed at as unworthy of a real university and more likely to produce 'skilled boiler makers' than real professional engineers. At the present time other colleges are instituting similar organizations."

In concluding his report on the University of Cincinnati Engineering College, Professor Mann says:

"The co-operative system at the University of Cincinnati is the most complete and thoroughgoing solution of this problem yet presented.

"Recently Dean Schneider has been able to express this fundamental educational conception of the co-operative educational system in a manner that is easily comprehensible to university men. Several of the industrial firms co-operating with the university are supporting industrial research laboratories for the purpose of increasing production.

"These laboratories are treated by the university exactly like other sections of an industrial plant; so that upper classmen, who have shown ability in investigation by the way in which they have discovered and defined problems in industry during their earlier years in shop experience, are assigned here as assistants on research problems for their regular bi-weekly tasks."

At the same time as the Carnegie Foundation published its report Dr. Gray, of the British government, published an account of his visit to America. In this account Dr. Gray characterizes Dean Schneider as "the far-sighted genius."

The British government emphasized the fact that Dr. Gray's trip to America was to study the educational system and especially the co-operative system as established by Dean Schneider. The British government is contemplating copying the Schneider plan in Empire schools. Dr. Gray in his report says:

"By far the most potent and scientific factor in linking up the interests of the school or college and factory, as well as the most hopeful in obtaining the future industrial prosperity of the American nation, is to be found in the part-time labor system, which owes its birth to the far-sighted genius of Dean Schneider of Cincinnati."

Dr. Gray says that the co-operative system of education is the only way that Great Britain will be able to solve her education problem of keeping the children in school.

"The Cincinnati system is the most potent factor in linking up of collegiate and industrial life, because it meets squarely the basic problems of industrial community," Dr. Gray continues.

"It is the most scientific factor because it is continually adjusting general principles to the needs of industry. It is readjusting practical shop and factory experience by appeals to the domain of scientific law, and that, not in the casual or irregular way, or at long intervals of time, but by fortnightly movements of the students to and fro between theory and practice."

The engineering colleges are beginning to grasp the real educational significance of the co-operative shop work, and industrial laboratories at universities will surely be forthcoming as soon as the conception of their national scientific and industrial importance is clearly defined. A combination of the two undoubtedly supplies the ultimate solution of the problem of shopwork in engineering education.

TECHNOLOGY AIR SERVICE CLUB IS ORGANIZED

Fliers meet at Hotel Lenox for election of officers

THE service was well represented at the first banquet of Technology air service men. Fourteen former pilots, observers and balloonists of the army, navy and Marine Corps were present, men who had helped win the war in the United States and abroad, and several of whom have one or more German planes to their credit. Aside from the immediate object of bringing together members of the Institute who have the common interest of service in the air forces during the war, the banquet was held to consider the entry of a Technology team in the aero meet to be held at Atlantic City in May.

After dinner Paul Sheeline, '19, described the events to be held at the meet and read letters he had received regarding Technology's participation. The prospects of getting planes or balloons were discussed informally. Assistance is expected from the airplane manufacturers, as the Atlantic City meet is the first large meet to be held in this country by other than professional fliers, and the extensive use of aircraft for sport purposes is not assured as yet. It is believed that the support of the Technology Alumni Advisory Committee on Athletics may be counted on.

It was decided to organize and elect temporary officers, in spite of the absence of a large proportion of the fliers at the Institute. The following men were chosen: President, Sheeline; vice-president, Guy Davis; secretary-treasurer, Edward Van Dusen.

The Technology Air Service Club is open to all students at the Institute who have flown in planes, dirigibles, or balloons. Those desiring to join are requested to leave their names in the Information Office. Dues will be a nominal amount and all fliers are urged to join.

PRATT BEQUEST CONTESTED

Pratt heirs assert conditions of \$750,000 bequest not fulfilled

QUESTION of the forfeiture of a trust fund of approximately \$1,000,000, now in the possession of the Massachusetts Institute of Technology, was raised before Judge DeCourcey in the Supreme Court when heirs of Charles H. Pratt opposed a petition of the Institute to sell certain real estate for the purpose of changing investments.

Mr. Pratt, a Boston attorney, died May 7, 1912. It was his desire, as expressed in his will, that his estate be held in trust for twenty-one years, unless before that time a fund of \$750,000 should accumulate. In that event he provided that the money was to be used "forthwith" for the establishment of the Pratt School for Naval Architecture and Marine Engineering, as a memorial to his parents and other members of his family.

The heirs now maintain that the Institute lost the right to the fund when it did not begin building after it had come into possession of the fund. They assert that by the Institute's alleged failure to build "forthwith" — that word being written in Mr. Pratt's will — they are entitled to share in the distribution of the fund, but should the court rule to the contrary, they declare they had the right to share all in excess of \$750,000.

The Institute denies that there was unreasonable delay in complying with Mr. Pratt's wishes. It asserts that financial conditions brought about by the war, including the increased cost of materials and labor and restrictions placed on building activities by the war industries board, virtually prohibited the building of the school. Also, according to President Maclaurin, the awakened interest in shipbuilding and the rapid changes that were being made in that business, necessitated a thorough study of the program of courses to be given.

The Institute also claims that it is entitled, under the residuary clause, to the sum in excess of \$750,000.

After Judge DeCourcey had heard evidence to settle certain facts involved, he announced that he would report the case to the full bench of the Supreme Court for final determination.

Inventory of Mr. Pratt's estate, filed October 9, 1912, showed \$243,805.49 personal and \$455,199.96 real.

Seven cousins of Mr. Pratt contested the will, and the Institute trustees did not come into possession of his property until 1915, when an inventory showed an estate of \$816,987.69.

On October 4, 1916, the trustees turned over to the Institute \$935,000. As Mrs. Fannie B. Pratt, mother of the testator, had a life interest in some of the estate, the Institute extinguished her rights under an agreement made to pay her \$10,000 a year during life.

A full account of the history of the Pratt bequest may be found in the REVIEW of January, 1918.

THE SYMBOL IN TECHNOLOGY

A letter for the Committee on the War Memorial

TO THE EDITOR OF THE TECHNOLOGY REVIEW:

Dear Sir: The TECHNOLOGY REVIEW requests suggestions in regard to a Technology War Memorial.

The modern tendency is to erect "memorials" of a useful order such as, for instance, as applied to Technology, a gymnasium or a boathouse. This type of memorial satisfies the physical rather than the spiritual needs. I imagine that the general demand from the graduates will be for this sort of a memorial, but I would like to speak in favor of something more abstract and symbolic, something that would minister to the spirit and stimulate the ideals of the students. A gymnasium or boathouse or whatever was built would include a bronze tablet stating that the building was erected as a memorial for those who died in the war, but it would be used by the students as a gymnasium or boathouse and chiefly regarded as such. The usefulness and advantages of such buildings are self-evident, while the usefulness of high ideals and the power of spiritual forces are not self-evident; they are, however, at least of equal if not of greater importance. The world of today and the student of science in particular is so absorbed in physical phenomena that it is easy to lose sight of the spiritual forces that also have a part in life. Victor Hugo said, "The future belongs to Voltaire; not to Krupp," and the war seems to have fulfilled his prophecy. The power of the spirit behind the slogan, "Ils ne passeront pas," was greater at Verdun than the power of the wonderful German war material.

It seems to me that the memorial is a splendid opportunity to put a symbol into the midst of the new Technology.

I would have this symbol in the form of a statue of heroic size, perhaps thirty feet or more in height, and of the same general order as the Statue of Liberty; this to represent the spirit of liberty, democracy and high ideals of culture. In addition to the main figure I would have two smaller ones representing the typical soldier and sailor of 1918. The war showed to us our type, which the French cartoonists were so quick to grasp when our soldiers appeared over there. Youthful looking, alert, keen, athletic, clean shaven; the type should be immortalized in bronze.

If such a memorial were planned, endless money, time and exertion should be expended in order to discover and to engage the most capable artist to do the work. An ancient sage has said, "Wisdom cometh from the opportunity of leisure," and accordingly the artist should be given every encouragement to create in the most favorable atmosphere and not be harried and hurried in order to have the work ready for any fixed occasion. Technology has won many honors in the past in other fields; nothing could bring greater honor and glory to the Institute in the future than to have been the means of the creation of a noble and lasting work of art.

Very truly yours;

(Signed) A. G. KELLOGG; '09.

M. I. T. HAD BIG SHARE IN TRANS-ATLANTIC FLIGHT

Navy found aviation school in operation when war needs came—
Hunsaker, who built NC's, a graduate of Tech

THE part which the Massachusetts Institute of Technology has played in the development of the science of aviation the past half-dozen years, and the relation which this work bears to the trans-Atlantic flights made by the United States Navy, is not generally known. But it is safe to say that but for the wise foresight of President Maclaurin and some members of the Faculty of the Institute the United States would have been in a much more serious predicament concerning aviation during the war than it was.

But President Maclaurin and his associates had a vision of what aviation was liable to become and they acted on the inspiration of that vision, as they had acted on the vision of a future merchant marine for the United States which would require men trained in the service of marine architecture and navigation to meet the emergency which arose during the war. What the Massachusetts Institute of Technology did for the Merchant Marine is a wonderful story in itself — fully as wonderful as what it did for aviation.

Although the shipbuilding activities of the country had been at a minimum during the decade preceding the war, the Faculty of Technology knew for certain that there must be a future reaction, so it kept steadily at its duty of preparing men in naval architecture. The department was costly to maintain and the number of students necessarily small, but it continued graduating its six or eight marine engineers a year, and it is on these men that have rested largely the burden and responsibility of ship construction in the enormous expansion of the business which the past two years have witnessed.

With precisely the same kind of foresight Technology "sensed" the future, certain need of aerodynamical engineers, men who having been educated in the principles, could undertake the development and construction of air and hydroplanes. In the nineties it established its first wind tunnel, a modest affair in the Mechanical Engineering Laboratory, a conduit two feet square with the possibility of a wind through it of twelve miles an hour. This had been used for experiments with air currents, and in addition some researches were made with reference to forms of air propellers. It is interesting to note that of the graduates of the Institute of 1912, no less than ten selected for thesis subjects some phase of the aviation problem, two of them engaged at once in professional aeronautical work, while another, a Spanish young man, went home with the intention of devoting himself to military aviation. In the group of graduation theses of 1913, two were on aeronautical subjects, with others discussing motors and fuels. This serves to show how early the Institute began to think in terms of aerodynamics.

"It was in March, 1913," said President Maclaurin, "that I had some conversation with the secretary of the navy, to discuss whether it might not be practicable to undertake something in the way of the study of aerodynamics by its naval officers. Already, in compliance with an act of Congress, all naval constructors graduated at Annapolis were detailed to the Institute for finishing studies. Thus it is that all the younger men in this division are former students of Technology and members of its alumni body.

"The navy had not up to that time made any suggestions with reference to including aerodynamics in any of the courses, but it seemed to me, and I expressed the idea to the secretary, that it was a time when the government ought to be devoting attention to the scientific designing of aircraft. Already the Faculty of the Institute had very seriously discussed the question of establishing postgraduate courses in the subject."

At this time there was a young naval constructor, Jerome C. Hunsaker, attending the Institute who had been regularly graduated, receiving his M.S. in 1912, and still continuing with special work. At the suggestion of Dr. Maclaurin, Lieutenant Hunsaker was detailed by the navy to visit the aeronautic centers of instruction and laboratories in Europe, and, returning, to become an instructor in the new courses which Technology instituted in 1914.

Since an airplane is virtually a boat so far as lines, strains and propulsion are concerned, the new work was made a part of the Department of Naval Architecture, and under the direction of Professor C. H. Peabody, head of that department. The special instruction was given by three men, Lieutenant-Commander Hunsaker, whose specialty was aircraft design and theory of construction; Professor E. B. Wilson, who taught the mathematical and physical principles involved, and Professor, now Major J. C. Riley, who was an expert in motors. These three men developed with the war — the first to be in charge of airplane design in the navy under Admiral Taylor; the second to be a valued adviser of the Council of Defense and the government, and Major Riley, to important work overseas in the perfecting of motors, in which he is still engaged.

It was this experience with the Institute on the part of the navy which was the stepping stone to the complete confidence in it that later caused the only naval aviation detachment school to be established at Cambridge within the Institute's walls, where all of its men received from Technology professors the principles of construction and flight. It was this firm foundation on which Lieutenant-Commander Hunsaker built in the work of navy plane construction that has culminated with successful trans-Atlantic flight. The foundation was the clear discernment of President Maclaurin and his associates, which furnished for the right men an elaborate preparation in the principles of aerodynamics, and for this Technology is entitled to full credit.

It is of further interest to know that at the very beginning of the co-operation between the navy and the Institute the latter equipped an aerodynamical laboratory, fitted with a six-foot wind tunnel and special measuring devices unique in the country, whereby experiments of highest value were carried on. This apparatus, formerly in a little shed on the Cambridge grounds, is now installed in the du Pont laboratory, and in condition to furnish further valuable theoretical results.

One of the remarkable features of the whole story of Technology and airplanes is the number of alumni who have become famous in the aeronautical work, exclusive of the fliers, some of whom, like Dinsmore Ely, '18, Cyril M. Angell, '18, gave their lives in battle to the service of their country. Earle L. Ovington, '04, and Harry Atwood, '05, are among the pre-war aviators of popular fame; in the navy, Hunsaker, with his students in aerodynamics from Technology; while in the army, Henry Souther, '87, who, till his death, was in the highest place that a civilian could reach, with Captains Clark, '08, Harms, '15, Jones, '16, and Gorrell and Martin of '17. Some fifty other graduates of Technology are in the work of constructing airplanes or their materials or fittings, and all of these men were in the group that in the emergency gave their skill and experience for the salvation of their country.—BOSTON GLOBE.

A CHANGE IN THE BY-LAWS OF THE ALUMNI ASSOCIATION

ACCORDING to the By-Laws of the Association notice is hereby given of a change in the By-Laws, suggested by the Council, May 26. This comes before the Council for final action after thirty days' notice.

Article 1 of the By-Laws of the Association to be increased by one section, Section 6, to read: The elected officers of the Association shall take office each year at a date to be fixed by the Council and not later than July 1.

STEAM ENGINES FOR AEROPLANES

Adams, '14, declares steam will supersede gasoline as motive power

STEAM as the substitute for gasoline in the propulsion of aircraft of all types will be the greatest development during the next few years in navigation of the air, because the zenith in the refinement of the gasoline engine has almost been reached, according to Porter H. Adams, M. I. T., '14, who attracted international attention some years ago by the announcement of a plan to encircle the globe by aeroplane, and who did much in overcoming the preliminary obstacles for such a flight.

Mr. Adams has been devoting his entire time in the preparation of the preliminary plans for a steam power plant to be used in the large type of aeroplane since his retirement from the aviation section of the navy shortly after the armistice was signed. A graduate of Technology, he has won a considerable reputation for original investigations in aerial navigation.

"The advantages of a steam power plant used in aeroplanes will be very great," he said in discussing the experiments he is now carrying on. "My plan is to generate steam through the burning of oil. The present consumption of gasoline is so great that it will soon be a difficult problem to obtain sufficient quantities of high test fuel for use in the internal combustion engines so that they will operate successfully on lower grades of fuel or else limit the use of gasoline.

"The advantage of steam is that a properly designed steam plant will be able to use any type of fuel, from gasoline to the crude oils, and this reason, together with the fact that an efficient steam plant is the most reliable of all motive powers, is the reason that I am working on the problem of a steam power plant for the large type of aircraft which will come into commercial use as soon as the transatlantic flight is made."

The inventor planned to bring up the question of the adaptability of steam as a motive power at the Pan-American Aeronautical Convention here in May.

UNDERGRADUATE ACTIVITIES

WILLIAM B. BARROW, JR., '21

CONCENTRATED! That adjective more fully describes the social season at Technology this spring than any other. Deprived of the normal series of functions in the fall, the students have staged one event after another in quick succession during the spring term in an endeavor to make up the deficit.

Shortly after the mid-year examinations came the Musical Clubs concert at Simmons, followed by the usual dance. This was well attended by men from the Institute. The ball was kept rolling with periodic Dorm dances, Cosmopolitan Club dances, Fraternity house parties and formal dances, smokers and get-togethers of the various Engineering societies, and a series of Course Socials re-instituted by President and Mrs. Maclaurin. These happily conceived socials for bringing the Faculty and undergraduates together were most successful before the war, and fully realized their purpose during the past season. They were held at the president's mansion, and in general consisted of a "shadow play" under the direction of Professor Rogers, musical entertainment furnished by student talent, and impromptu skits by some one or two of those attending.

The culmination of the social season, of course, came with Junior Week. Far later than usual, but losing none of its zest thereby, the week was opened with that ten minutes of "intensified Hell," the "Technique" Rush. Urged on by the maddening tones of the "Technique" Band, P. T. Coffin, '21, C. R. Myers, '22, Monroe Haines, '20,, J. H. Scott, '20, and J. D. Crosby, '21, secured the five lucky paddles that entitled them to free autographed copies of this year's annual. Fifteen others secured paddles that give them the right to have their books signed by President Maclaurin.

The Junior Prom, in the hands of M. M. Whitaker, R. H. Gee, K. Roman, John C. Nash, W. L. Cofren and K. F. Akers, was a marked success. It was held at the Copley-Plaza, and dancing was continued until four in the morning. Decorations, music and favors were well chosen.

Performances of the Tech Show, "A Doubtful Medium," were given in Northampton, Friday matinee and evening, at the Hollis, in Boston, on Saturday afternoon and evening, and at the Somerville Theatre Monday evening. Of all the performances, perhaps the two on Saturday, before home audiences of keen appreciation, were the best. However, all were so well done, that it hardly seems fair to pick any single one as more exceptional than the rest. Walt Frazier, '19, F. S. Britton, '19, and J. A. Buerkin, '19, all of last year's cast, played the leading roles. E. W. Booth, '21, P. D. Appel, '21, W. J. Hamburger, '21, and J. A. Philbrick, '20, also took effective parts in the cast. The Show this year was featured by a ballet, exceptionally well staged. The Book was written by Jesse Stam, '19, and J. G. Lee, '21. W. T. Hedlund, '20, was responsible for most of the music. A sumptuous banquet was given the participants after the series of performances.

"Technique" 1920 has been declared the best Junior Annual since 1916. Certainly the reading matter, the photographs, the sketches and the "grinds" have been balanced in a professional fashion. "Technique" 1921 is to be in the hands of the following: R. H. Smithwick, Editor-in-Chief; W. S. Barker, Business Manager; H. C. Burton and E. P. Clarke, Assistant Managers; W. Dean, Treasurer. The editorial

portfolios have been awarded as follows: R. Hayward, Art Editor; H. Macmillan, Statistics; F. B. Kittredge, Societies; Z. Giddens, Grinds; J. Worcester, Faculty; I. D. Jacobson, Portfolio. Work has already begun on the next year's issue and the editors are straining every effort to excel the standard set by their predecessors.

Ranking third in the whole country in circulation among periodicals of its class, the "Voodoo," superseding the old "Woop-Garoo," has rapidly leaped into prominence as the "Life" of the Institute. This monthly is headed by Edward Edwards, editor-in-chief; R. H. Smithwick, treasurer; D. E. Stagg, managing editor; R. J. Spitz, business manager; E. Davis, circulation manager; and K. R. Sutherland, publicity manager.

"The Tech," fully manned in all its departments, entered Volume XXXIX with rosy prospects. Its correspondents have even written from London, and a letter from an English nobleman is good testimony of its extensive circulation. Three thousand copies is not an exceptional issue. Following the precedent of the past three years, "The Tech" will continue publication throughout the summer. The general manager is C. B. Capps, '20, supported by H. V. Howes, '20, editor; Carole A. Clarke, '21, managing editor; M. A. Loucks, treasurer; R. A. St. Laurent, '21, advertising manager, and Scott Wells, circulation manager.

Hampered by the fact that rehearsals had to begin too late to sign up many contracts for concerts, the Musical Clubs this spring have not had as successful a season as usual. Besides the Spring concert at the Somerset, the Simmons concert, and performances at Somerville, Lynn, Winchester and several other minor points, the season has been mostly rehearsing. Much better results are anticipated next year by the officers. The election at the banquet which closed the activities resulted in electing H. N. Landis, '21, general manager; R. C. Rundlett, '21, treasurer; F. L. Raymond, '21, publicity manager. The leaders chosen were, for the Glee Club, H. O. Davidson, '20, assisted by L. W. Conant, '20; for the Mandolin Club, J. R. Hotchkiss, '21, assisted by C. A. Breed, '21; for the Banjo Club, M. C. Knox, '20, with F. W. Walton, '22, as assistant.

The N. E. I. A. A. Track championship was won by Technology for the third consecutive time. In the I. C. A. A. A. meet Fortune was not so kind, and the Institute was forced to be content with ninth place. Cornell won the meet. The injury of Mich Bawden, '21, a short time before deprived the team of a star sprinter both in this contest and in the dual meet with Dartmouth. The team was further crippled in the match at Dartmouth by the absence of Dandrow, star hammer thrower, and Nagel, pole vaulter. By superior strength in the Field events, Harvard was able to take home the laurels in the dual meet with that college.

Consistently winning all their meets for the past four years, the Swimming Team only felt defeat once this year, when Yale's natators proved too strong. Handicapped by the need of a tank of their own, this record of one defeat in four years is more of a credit to the team than usual. C. W. Scranton, '21, is next year's captain. Other members of the team are M. Untersee, '19; C. D. Greene, '21; S. M. Biddell, '22; H. C. Fish, '22; T. T. O'Daly, Jr., '22; W. B. Purinton, '22; R. H. Skinner, '22; and I. H. Rogavin, '21.

The freshman first eight won their races with Stone, Middlesex, Tufts and Harvard Regatta. The Sophomore Field Day Crew, and Harvard, '22, are the only crews that have been able to nose out a victory against them. E. T. Steffian, '21, has been elected general manager, with G. P. Anderson, '22, as his assistant. For the class crews, W. F. Clements, '21, will manage the 1921 aggregation, E. W. Willett the 1922 crew.

Up to the present the winner of the Tennis tournament cannot be picked. The

Varsity team this year, composed of Broockman, '20; Barron, '20; McWane, '21; and West, '21, have a string of victories to their credit.

The annual Interclass Track meet went to the sophomores. The juniors lost by one point, the final score being, 1921, 52- $\frac{1}{2}$; 1920, 51- $\frac{1}{2}$; 1922, 41- $\frac{1}{2}$. Two records were broken, the pole vault being set at even twelve feet by Nagel, and the hammer-throw being pushed up to 134 feet, 6 $\frac{1}{2}$ inches by Dandrow.

TECHNOLOGY EXPERT SETS COST OF WAR TO ALLIES AT \$200,000,000,000

ACCORDING to Lieutenant-Colonel D. C. Jackson, head of the Electrical Engineering Department of the Institute, and a personal friend of President Wilson, the war that will be officially ended with the signing of the peace treaty in Versailles has cost the United States and the Allies \$200,000,000,000. The lieutenant-colonel arrived home early in May, after having spent considerable time in the devastated regions of France, Belgium and Italy, securing data on war costs and damages for the use of President Wilson at the Peace Conference.

Colonel Jackson had a staff of two hundred and fifty experts under him, officers and men, a formidable statistical force, with which he went over the devastated districts, making exhaustive investigations and examinations. Colonel Jackson said he had included property damage, pensions, cost of equipment and many other items in his estimate of the total cost of the war to the United States and the countries associated with the United States in the campaigns against the Central Powers.

The colonel said that he could not tell whether the United States would ask for part of the indemnity to be asked of Germany. He added that certain French newspapers, supposed to be inspired, have published the fact the French will claim \$16,000,000,000 from Germany and the Belgians \$8,000,000,000.

"These demands are not so extravagant," he said, "when it is considered that the devastation caused in Belgium and Northern France by the Germans is something that Americans who have not seen the ruined area cannot understand. In thousands upon thousands of square miles there is not a building standing."

TECH MAN IN "Y" WORK

THE San Francisco Young Men's Christian Association has added educational guidance to its already large program of service for discharged soldiers and sailors. A. L. Marston of the Massachusetts Institute of Technology, and lately with the United States Army, has been engaged to take charge of this work. He will give educational advice not only to the eight hundred discharged men now members of the San Francisco Association, but to enlisted men at the Young Men's Christian Association downtown club at 149 Powell Street and to discharged men generally.

GOVERNMENT TAKES OVER TECHNOLOGY OBSERVATORY

UNDER authorization of the current appropriation act for the Department of Agriculture, which provides \$10,000 for investigations in volcanology, the United States Weather Bureau on February 15, 1919, formally took charge of the volcanological observatory on Kilauea, Hawaiian Islands. Prof. T. A. Jaggar, Jr., formerly of the Massachusetts Institute of Technology, who has been director of the observatory since its foundation, will remain in charge. The investigations at Kilauea were begun in 1912, under the auspices of the Massachusetts Institute of Technology, and since 1913 have been maintained at the expense of the Hawaiian Volcano Research Association, consisting chiefly of residents of Honolulu. It is expected that the Weather Bureau's work in volcanology will be developed in many details and eventually be extended to Alaska and other regions under the control of the United States in which active volcanoes exist.

THE HORRORS OF WAR!

Letter (informal) to the editor of the Review

Dear Rogers:

TECH BUREAU,
April 25.

There is a jolly crowd here in the Bureau, as usual. Some one stepped behind George Gibbs' desk and picked up this memorandum.

"Chuck Loomis is now a captain.

Send B. V. D.'s to Chuck Loomis."

Before the laugh died out I was told to send it on to you — for interest or amusement.

(Signed) PENN BROOKS, '17.

O.K. E. P. BROOKS, Lieut.

AN ARTILLERY SECTION FOR THE R. O. T. C.

LIEUTENANT-COLONEL Fred M. Green, C. A. C., has been detailed to Technology by the War Department for the purpose of organizing an Artillery Section of the Reserve Officers' Training Corps for the sophomore class. Some of the academic studies which the men regularly pursue will count as part of the military work. They will receive military credit toward a reserve commission and also a bonus of about \$140 a year which the government offers to those who take military work in their upper-class years.

MANY ALUMNI ATTEND FRENCH AND BRITISH UNIVERSITIES

THE Technology Bureau of the American University in Paris announces the following additions to the University list at Toulouse: D. N. McMurtrie, '15, H. L. Cassidy, '19, J. M. Bugbee, '18; at the London School of Economics and Political Science: I. G. Brown, '15; at Trinity College, Cambridge: R. B. Haynes, '13; at Bellevue: A. B. Merry, '10, J. B. Woodward, '18; at the Sorbonne: W. P. Sammet, '21, D. L. Patten, '16; at Grenoble: H. F. Marshall, '19; at Poitiers: G. A. Coleman, '16; at Besaneen: M. B. Lewis, '14; at Bordeaux: H. W. Ericksen, '20.

PROFESSOR JACKSON BACK TO WORK

ANOTHER of the heads of departments at the Massachusetts Institute of Technology is about to resume his duties after a period spent in the service of his country. Professor D. C. Jackson, head of the department of electrical engineering, landed in May, after about a year of special service in France. His mission, at the time he left Boston, was not disclosed, but naturally it was in the line of the utilization of electricity. During his absence Prof. R. R. Lawrence has been acting head of the department.

The instruction of marine engine room officers was resumed at Technology today after an interruption of a couple of months on account of lack of appropriation.

SCHOLARSHIP FOR TECHNOLOGY

THE Sons and Daughters of the National Society of New England women, formerly known as the Second Junior Sons and Daughters, were officially organized recently as Puritan Colony, with a membership of eighteen, by Mrs. Henry Clark Coe, first president general of the National Society of New England Women, in response to a special request from the president general, Mrs. Robert Fowler Cummings of Chicago.

The Colony has taken for its object the founding of a scholarship at the Massachusetts Institute of Technology in Boston and for its local activity it will co-operate with the work at Colony House, under the leadership of Mrs. John Lansing Swan.

PROFESSOR SEDGWICK IN CALIFORNIA

PROF. W. T. SEDGWICK of the Massachusetts Institute of Technology and the Harvard-Technology School of Public Health, left Boston on May 1 for California, where he is to give instruction in "Sanitary Science and Public Health," and in "Public Health Problems" during the summer session of the University at Berkeley. Professor Sedgwick recently has been elected to membership in the International Health Board of the Rockefeller Foundation and also has been appointed directing sanitary engineer, with the grade of assistant surgeon general, in the Reserve of the United States Public Health Service.

TO CLASS SECRETARIES

AN attractive opportunity is offered by the Lake Placid Club in the Adirondacks, for class reunions this autumn. This club has seventy buildings with eighteen hundred rooms. From Boston alumni could take the Boston and Albany train to Utica. After September 15 the club is glad to make arrangements with alumni who desire to have class reunions. The expense is reasonable and further accommodations can be had for women, former students or wives of the alumni.

NO JUNE EXERCISES THIS YEAR

OWING to the fact that most of the class of 1919 graduated without ceremony last fall and left the Institute immediately for war work, there are no graduation exercises this year, and, consequently, no alumni reunion. But save up for June, 1920—that's the big year!

PUBLICATIONS OF THE INSTITUTE STAFF

- AYDELOTTE, FRANK. "War Issues Course." Find in report published by the War Department Committee on Education. In press May 16, 1919.
- CROSS, CHARLES R. "Theodore Grover; an Appreciation." *TECHNOLOGY REVIEW*. November, 1918. Vol. XX. Pp. 674-675.
- "A. M. Ritchie." 1870 Class Notes. *TECHNOLOGY REVIEW*. November, 1918. Vol. XX. P. 704.
- "Death of Frederick Bowles." 1870 Class Notes. *TECHNOLOGY REVIEW*. April, 1919. Vol. XXI. Pp. 219-220.
- "Death of Theodore F. Tillinghast, Charles A. Wilbur and Professor Pickering." *TECHNOLOGY REVIEW*. April, 1919. Vol. XXL. P. 220.
- HAVEN, GEORGE B. "The Effect of Moisture upon the Strength of Aircraft Fabric." Pamphlet of 18 pages delivered at Atlantic City, June, 1918, before the American Society for Testing Materials.
- HAYWARD, CARLE R. "Laboratory Electro-Deposition Plant." *Chemical and Metallurgical Engineering*. March 1, 1919. Vol. 20. P. 240.
- HOFMAN, H. O. "Lead." *The American Year Book for 1918*. Appleton, New York, 1919.
- "Metallurgy of Lead." *Engineering and Mining Journal*. Vol. 107. 1919.
- "Recent Improvements in Lead Smelting." *Mineral Industry*. Vol. XXVII. 1918.
- HORSCH, W. GRENVILLE, Research Associate in Applied Chemistry, and Robert E. Wilson, Assistant Director Research Laboratory of Applied Chemistry. "An Electrolytic Process for the Production of Sodium Permanganate." *Proceedings of the American Electrochemical Society*. Spring, 1919. Pp. 207-220. (Formal volume not yet issued.)
- JACKSON, DUGALD C. and John Price Jackson. (Revised by N. Henry Black.) "Electricity and Magnetism." Macmillan Co. New York. April, 1919. 589 pages. Illustrated. Size 8vo.
- JOHNSON, LEWIS JEROME. "Notes and Syllabus in Kinematics and Kinetics." Second edition revised. Harvard University. 1919. 21 pages. Pamphlet $4\frac{1}{2} \times 7$.
- "Land — for Production." Address at Reconstruction Conference of National Popular Government League, included in Section 1 of the Proceedings of the Conference. Washington, D. C. January, 1919.
- "Production and Obstruction — Two Purposes in Land Ownership." At present circulating privately in manuscript form. A revision used in class work at the Massachusetts Institute of Technology.
- KENNELLY, A. E., and H. Nukiyama. "Electromagnetic Theory of the Telephone Receiver." *American Institute of Electrical Engineers*. New York. March 1919. 49 pages. Size $8\frac{1}{2} \times 6$.
- "Transmission Line Computations." Reprinted from the *Electrical World*. New York. February 22, 1919. 5 pages. Size 9×6 .
- "A New Geometric Model for the Orthogonal Projection of the Cosines and Sines of Complex Angles." Philadelphia, Pa. April, 1919. 12 pages. Illustrated. Size $9\frac{3}{4} \times 6\frac{1}{2}$. Reprinted from the *Proceedings of the American Academy of Arts and Sciences*.
- LYON, W. V. "Economic Use of Static Condensers." *Electrical World*. New York. April 12, 1919.

- MACINNES and Leon Adler. "Hydrogen Overvoltage." *Journal of the American Chemical Society*. February, 1919. Vol. 41. Pp. 194-207.
- MILLER, EDWARD F. "Notes for the Use of Engineer Officers Training for the Merchant Marine." *Massachusetts Institute of Technology*. January, 1919. 55 pages.
- SMITH, ROBERT H. "Text-Book of Advanced Machine Work." *Industrial Education Book Co.* Boston, Mass. March, 1919. Fifth edition revised and enlarged. 744 pages. 823 illustrations. Size 5 x 8.
- PASSANO, LEONARD M. "Day of Wrath." (Verse.) *Baltimore American*. March 2, 1919.
- "The Financial Administration of Education." *School and Society*. May 3, 1919. Vol. IX. P. 227.
- SPEAR, ELWOOD B. "Some Problems of Gas Warfare." *Scientific Monthly*. March, 1919. P. 275.
- SPOFFORD, C. M. "Reconstruction and the Engineer." Presidential Address, Annual Meeting of Boston Society of Civil Engineers. *Journal of the Boston Society of Civil Engineers*. April, 1919. Vol. 6. Pp. 139-145.
- "Boston Army Supply Base." *Journal of the Boston Society of Civil Engineers*. March, 1919. Vol. 6. Pp. 125-133.
- With Frederick H. Fay and Sturgis H. Thorndike. "Engineers' Report" forming part of the Report of the State Harbor Commission to the Members of the Maine Legislature. Augusta, Maine. December 31, 1918. Illustrated. 108 pages.
- SWAIN, GEORGE F. "The Liberal Element in Engineering Education." *Proceedings of the S. P. E. E.* December, 1918. Vol. IX. Pp. 97-107. Size 8vo.
- "A₁ a New Principle in the Theory of Structures." March, 1919. New York. *Transcript American Society of Civil Engineers*. March, 1919. Vol. XLV. Pp. 75-92. Illustrated. Size 8vo.
- VELANDER, EDY. "Long-Line Phenomena and Vector Locus Diagrams." *Electrical World*. New York. February 1, 1919. Illustrated. Size 4vo.
- WARREN, CHARLES H. "On the Microstructure of Certain Titanic Iron Ores." *Economic Geology Publishing Co.* September, 1918. Vol. XIII. Pp. 419-442. 6 illustrations.
- WEBSTER, D. L. "The Origin of the General Radiation Spectrum of X-Rays." *Physical Review*. April, 1919. Vol. XIII. Pp. 303-305.
- "An Approximate Law of Energy Distribution in the General X-Ray Spectrum." *Proceedings of the National Academy*. May, 1919. Vol. 4. 5 pages.
- WHIPPLE, GEORGE C. "Vital Statistics." New York. May, 1919. Vol. 1. 517 pages. Illustrated. Size $7\frac{1}{4} \times 4\frac{1}{2}$.
- WILSON, ROBERT E., Assistant Director of the Research Laboratory of Applied Chemistry, and W. GRENVILLE HORSCH, Research Associate in Applied Chemistry. "An Electrolytic Process for the Production of Sodium Permanganate." *Proceedings of the American Electrochemical Society*. Spring, 1919. Pp. 207-220. (Formal volumes not yet issued.)
- With A. B. Lamb and G. L. Wendt. "A Portable Electrical Filter for Smokes and Bacteria." *Proceedings of American Electrochemical Society*. Spring, 1919. Pp. 197-205. From the Research Laboratory of Applied Chemistry. Robert E. Wilson, Assistant Director.
- With A. B. Lamb and N. K. Cheney. "Gas Mask Absorbents." *Journal of Industrial and Engineering Chemistry*. May, 1919. 20 pages. Illustrated. From the Research Chemistry, Robert E. Wilson, Assistant Director.



Photo by R. H. Ranger, '13

DAVID READ, '18
Gibbs' assistant in Paris



Photo by R. H. Ranger, '13

AFTERNOON' COFFEE IN PARIS
Gibbs doesn't like tea



Photo by R. H. Ranger, '13

GEORGE CROCKER GIBBS, '00



Photo by R. H. Ranger, '13

THE AMERICAN UNIVERSITY UNION IN PARIS
The men on the balcony are Tech men

UNDERGRADUATE ACTIVITIES

WILLIAM B. BARROW, JR., '21

(Continued from page 353)

Owing to an error this article was not printed in full in its proper place. — Ed.

Sophomores and freshmen, meeting in their annual Field Day in the early part of May, furnished some thrilling contests in a crew race, a baseball game, a relay race, and a tug o' war. The 1921 teams won the first three events, but the freshman tug o' war team proved the stronger in that event, winning the first two pulls. The 1921 numerals will grace the Field Day cup after all. It will be up to 1922 to redeem herself next year.

The show chosen for the aftermath of the athletic contests was "Sinbad," starring Al Jolson. Over a thousand students attended, with "bells on."

As has been the custom since Technology moved across the river, the class elections were held in the first week in June with the following results:

	1920	1921	1922
President	N. G. Abbott, Jr.	Garvin Bowden	W. F. Ferguson
Vice-President	Kenneth Akers	L. W. Conant	W. C. Morse
Secretary	K. J. Roman	F. W. Kittredge	W. B. Purinton
Treasurer	M. S. Burroughs	E. W. Davis	C. E. Brokaw
Inst. Committee	John Nash	R. J. Spitz	S. M. Biddell
	E. D. Ryer	W. F. Young, Jr.	A. L. Johnson
Exec. Committee	Percy Bugbee	H. P. Junod	N. O. Robinson
	K. D. Patterson	R. W. Barker	E. W. Hammond

Each of the engineering societies has closed its season with a banquet as has been the custom. The mechanical engineers have announced the following elections: H. O. Davidson, '20, president; W. F. Dewey, '20, vice-president; Spooner, '20, secretary; G. I. Brown, '20, treasurer; governing board, K. S. Roman, '20, F. L. Bradley, '20, A. H. Tuttle, '19.

All the former officers of the Electrical Engineering Society have been returned. H. B. Deal, '20, president; R. D. Booth, '20, vice-president; Miss Florence Fogler, '20, secretary; J. H. Wilson, '20, treasurer; executive committee to consist of J. G. Moir, '20, and H. F. Smiddy, '20.

Cleofan, the women's organization, reports a most successful year, although details are not available as to the nature of these successes. The officers are: President, Dorothy Brownell, '20; vice-president, Florence Fogler, '20; secretary, Cornelia Nelson, '21; treasurer, Valborg Aschehoug, special.

The interfraternity baseball championship goes to Beta Theta Pi. The runners-up were Phi Beta Epsilon, Sigma Chi and Kappa Sigma.

With a total subscription of over two millions Technology led all of the colleges in the country in the Victory Loan. The blue and white button was a common and popular lapel decoration during the weeks of the campaign.

Not satisfied with breaking records, the students tried their hand at breaking strikes during the telephone tie-up. Unfortunately, their good intentions were misconstrued by the strikers, and more than a few received broken pates and sore

muscles for their pains. The general consensus of opinion among those that returned seemed to be that crowd psychology and economic theories work a great deal better in classroom recitations than in actual practice. Militant telephone girls are not the most tractable group of individuals in the economic system, they found.

Only twenty-eight men met their Waterloo in the mid-year exams. Sixteen of these were junior freshmen, seven were regular freshmen, four were sophomores and only one a junior.

Some agitation has begun for a change in the existing examination system. The students resent being so closely proctored during the finals, and are endeavoring to find a scheme that will eliminate this feature. At the same time there are more radical suggestions of abandoning the present examinations as unfair and unsatisfactory, but few suggestions are to be found for a better. It will be interesting to note what lines this reform will follow in the fall. Right now the impending finals prevent the progress of any endeavor not along the lines of intensive review.

MISCELLANEOUS CLIPPINGS

Education and Americanization as the best counter agents of Bolshevism were urged before the legislative Committee on Education today. Professor William T. Sedgwick of Technology spoke for the bill recommended by the Special Recess Commission on Education which provides that after January 1, 1920, no person over twenty-one years and less than forty-five shall be employed in any working establishment, or by any contractor employing more than fifty persons, unless such person can speak, read and write English equal to the proficiency of the fourth-grade school or unless such person attends, for three hours a week for four weeks in the year, a school approved by the local authorities.

Professor Sedgwick told the committee that he is chairman of the Massachusetts Security League and is much interested in the Americanization of immigrants. "It is necessary to make our people more homogeneous. Today they are likely to herd together with only those who speak their own language. The State Board of Education is trying to prevent this evil and manufacturers are establishing classes in the working time of their employees and are even paying them for attendance. This is good policy, for it will result in better operatives, fewer accidents and more intelligent work. This bill puts pressure on manufacturers and contractors to promote education of their employees. This is not a 'highbrow' enterprise, but only an effort to promote Americanism and promoting intercourse among our immigrants from mouth to mouth. It will be a good time for both manufacturers and employees."

— THE BOSTON TRANSCRIPT.

Chemists and laboratory men will be the determining factors in future wars, if wars are fought, according to Dr. Arthur M. Noyes, distinguished chemist of the Massachusetts Institute of Technology, who is in Pasadena to engage in research work at Throop College of Technology, and who spoke today on the part science played in the world war. Dr. Noyes addressed the students of Throop and a large company of visitors at the college chapel.

According to Dr. Noyes, the United States must continue its chemical research work as a measure of preparedness. He believes that continued scientific research is as necessary as military training.

"We have no assurance," said Dr. Noyes, "that some nation in the future will not make use of gas warfare, employing the new and more effective gases developed through research. If the Germans had made better preparation for their first gas attack, and if they had employed the greater concentration of gas and powerful devices for using it that were later used, nothing could have prevented them from reaching the channel ports, as at that time the French and English were unequipped for gas warfare."

According to Dr. Noyes, the question of the inhumanity of the use of gas in battle is a question that has been much discussed by men of science. "A comparison of the use of gas and explosives is interesting," said Dr. Noyes. "Chemical warfare is not crippling, there is no loss of limbs and very little blindness resulting. After

all, the number of casualties from the use of gas is not large. The most serious effect is on the lungs and the agony of suffocation by those badly gassed is extreme. Whatever the decision may be on the inhumanity of using gas, it is a hopeless thing to prohibit. It is of the greatest importance to continue research in the field of gas warfare. This war has determined that it is not the human element that wins and gains advantages." — LOS ANGELES TIMES.

TUITION TO BE \$300

Increase of \$50 will go into effect in the fall of next year

THE Massachusetts Institute of Technology is to raise its tuition fee to \$300, against the \$250 which has been the amount for a good many years past. This fact is announced in the Institute's new pamphlet on General Information. The advance will not be in effect until the fall of 1920, students entering during the academic year 1919-1920 paying \$250 for that year and \$300 for succeeding years. The old fee will apply to all students now in the Institute till they have completed their courses.

Upon one condition could this rising cost of collegiate instruction be greatly regretted. If the rise were left unaccompanied by an equal and compensating increase in the size and extent of the scholarship support offered to students of little means, the colleges had better go out of business than advance their charges. Fortunately, however, no such alternative is proposed. In nearly all cases the announcement of higher charges has gone hand in hand with an announcement of larger and more accessible scholarships for the boys who deserve and require them. With this much taken care of, the higher tuition charges need cause little concern. They result from the increased expenses which colleges, in company with all other institutions and undertakings have been forced to bear in the general readjustment of price levels which has lately occurred. If the exaction of a somewhat higher charge from the students who can afford to pay more for their tuition leads to a corresponding increase in the salaries of college professors, and at the same time does not fall as a burden upon the students who cannot afford to pay more, it will be rather a blessing than an injury.

In addition there is the student tax which is assessed on all male members of the student body, half the amount being collected from those who pay only one term's tuition. From women students there will be collected \$3 or \$1.50, according to the time that they are in the school. The tax will be remitted and a corresponding amount furnished from a fund applicable to such uses, when the student receives the benefit of a scholarship. The proceeds of the tax will be devoted to the promotion of student life at Technology with especial reference to the physical and social welfare of the students. No part of the tax is to be given over for athletics or for other functions unless open without charge to every member of the student body. — BOSTON TRANSCRIPT.

IN THE PUBLIC EYE

NAVAL CONSTRUCTOR J. L. ACKERSON, '06, was appointed by Chairman Hurley to succeed Director-General Charles Piez, of the Emergency Fleet Corporation, in full charge of ship construction. Mr. Ackerson already was a vice-president of the corporation. Mr. Piez presented his resignation several months ago.

The new chief of construction, Mr. Ackerson, is a practical shipbuilder. He was born in Michigan in 1881 and was graduated from the Naval Academy in 1901. After service at sea he was assigned to the construction corps, going later to Massachusetts Institute of Technology for postgraduate work. He became connected with the Shipping Board as aide to Admiral Capps when the latter was general manager of the Fleet Corporation.

PROFESSOR ARTHUR H. BLANCHARD, of New York, one of the country's foremost teachers of highway engineering, who was in charge of the graduate course in highway engineering at Columbia University until that institute dropped the course temporarily a short time ago as a war measure, but who still keeps his office there, has been secured by Professor Spofford of the Civil Engineering Department to give the third year course in highway engineering at Technology this term. Professor Blanchard takes the place of Professor Hector J. Hughes of Harvard, who has given the course here in past years.

Professor Blanchard is president of the National Highway Traffic and of the American Road Builders Association. He was a member of the advisory committee on state highways in New York, appointed by Governor William Sulzer, is consulting highway engineer for the Board of Water Supply, New York, consulting engineer on bituminous pavements for the office of the commissioner of public works of the borough of Manhattan, consulting engineer to the New York and Pennsylvania state highway departments, a member of the advisory board on highways, New York state department of efficiency and economy. He was United States reporter to the Second International Road Congress at Brussels, 1910, and to the Third International Road Congress at London, 1913. He was United States representative on the International Committee on standard tests for highway materials, 1914.

He is a member of the American Society of Civil Engineers, the Societe des Ingenieurs Civils de France, the Canadian Society of Civil Engineers, the International Association for testing materials, the International Association of Road Congresses, the American Society for Municipal Improvements, National Highways Association, American Highway Association, Rotary Club, Engineers of New York, Delta Tau Delta and Sigma Xi.

MAJOR JOHN C. DAMON, '05, Engineers, United States army, who was taken from the 114th Regiment of Engineers for special duty in the Power Section of the War Industries Board, has now finished this work and returned to civil life, and entered the organization of the West Penn Power Co. Major Damon was born in 1882 in Concord, Mass., and was graduated from the Massachusetts Institute of Technology in 1905, remaining there the following year as assistant in the electrical engineering laboratory.

His professional experience began in the construction department of the Chicago Telephone Co., but he soon left this for construction work on large hydroelectric developments and transmission lines in the West. In 1909 he became superintendent of operation of the Colorado division of the Telluride Power Co., and in the following two years reconstructed and brought up to a high state of efficiency a large part of this pioneer electrical development. In 1911 he entered the organization of the Trinidad Electric Transmission Railway and Gas Co., Trinidad, Colo., and was active in the design and construction of its steam plant at Walsenburg, Colo. In July, 1912, he entered the engineering department of the Electric Bond and Share Co., which took up at that time the development of the Utah Power and Light Co. After working on designs for one hundred thirty thousand volt switching and substations and transmission lines, he went to Utah as engineer on the construction of these projects and later became assistant chief engineer of the Utah Power and Light Co.

In the fall of 1916, feeling that the United States should take its stand for justice in world affairs and could not long hold aloof, Mr. Damon decided to enter the Engineer Reserve Corps of the army, and subsequently received a commission as captain. He was ordered to Fort Leavenworth for training October 1, 1917, and in December was attached to the 114th Engineers at Camp Beauregard, Louisiana. Early in January, 1918, Captain Damon was relieved from duty with the 114th Engineers and detailed to the Power Section of the War Industries Board. In this capacity he was assigned to make studies of and recommendations for the power supply in several of the heaviest industrial districts of the East, including Philadelphia, Baltimore, Lancaster, Pittsburgh and Eastern Ohio, and the New England States. In September, 1918, Captain Damon was placed in charge of the development and control of the power supply in the Pittsburgh and Eastern Ohio District, and in the following month was promoted to the rank of major.

Major Damon is a member of the American Institute of Electrical Engineers and of other engineering societies.

FRANK F. FOWLE, '99, has formed a consulting engineering partnership under the firm name of Fowle & Cravath, with offices at Chicago. Frank F. Fowle, who until recently served as one of the receivers of the Central Union Telephone Company, was formerly a consulting engineer. Mr. Fowle was graduated from the Massachusetts Institute of Technology, Boston, in 1899, in the electrical engineering course, and then served nine years with the American Telephone and Telegraph Company in various engineering capacities, finally serving as manager of the Chicago territory of the long-lines system. From 1908 to 1912 Mr. Fowle was engaged in consulting engineering practice, headquarters in Chicago. In 1912 he went to New York and jointly with Dr. A. S. McAllister was in charge of the editorial department of the "Electrical World." In 1913 Mr. Fowle became editor-in-chief of the "Standard Handbook for Electrical Engineers" and entered engineering practice again in New York. Early in 1914 he was appointed one of the receivers of the Central Union Telephone Company, serving until recently discharged by the court. Mr. Fowle was elected a manager of the American Institute of Electrical Engineers on May 1. He has also recently been re-elected manager of the Chicago Section, Illuminating Engineering Society, and is a member of the development committee of the Western Society of Engineers.

NEWS OF ALUMNI ASSOCIATIONS

AKRON TECHNOLOGY CLUB—The Club held its first meeting at the Akron University Club, April 15, 1919, after a long period of inactivity, due to the war. Twenty-nine members attended the meeting and listened to talks by Mr. C. R. Johnson, who was a major in the Chemical Warfare Service, Mr. E. C. Gagnon, who was a first lieutenant in the Chemical Warfare Service; and Mr. G. W. Sherman gave a talk on the salvage plant which he was interested in organizing in Akron as a war measure.

Mr. H. S. Morse, Akron Service Director, outlined the duties of his office and his plans for the future in the growth of Akron.

After the talks, many enjoyed the privileges of the club in the form of playing cards, bowling, etc.

The second meeting was held at the Akron University Club on June 13, which thirty members attended.

At this meeting Mr. P. W. Litchfield, who had just spent a couple of months in Europe at the request of the Navy, for the purpose of studying aircraft and its possibilities, gave a talk which was very interesting and very much appreciated by all who attended.

The Akron Club plans to hold meetings once each month and at present is making plans for meeting at one of the summer resorts in conjunction with the Technology Club of Cleveland. As there is considerable rivalry between the two clubs, games of a competitive nature will bring out a good attendance and all present will enjoy a good time.

The following is an up-to-date list of members of the Akron Technology Club:

R. S. Scharr, 292 Spruce Street, Akron, Ohio; W. H. Eager, Whitman-Barnes Co., Akron, Ohio; H. S. Morse, Director of Public Service, City Building, Akron, Ohio; H. Litcher, 1055 Norka Avenue, Akron, Ohio; F. R. Peabody, Ira, Ohio; J. W. Kittridge, Diamond Match Co., Post Office 393, Barberton, Ohio; A. T. Gradolph, 641 Crosby Street, Akron, Ohio; R. W. Ferris, 55 Rose Avenue, Akron, Ohio; J. Tuttle, Experimental Department Firestone, Akron, Ohio; L. M. Latta, 55 Mull Avenue, Akron, Ohio; C. A. Lloyd, Carmichael Construction Co., Hamilton Building, Akron, Ohio; H. H. Partridge, Firestone, Tire and Rubber Co., Akron, Ohio; H. B. Pushee, General Tire and Rubber Co., Akron, Ohio; W. A. Sheppard, B. F. Goodrich Co., Sales, Akron, Ohio; B. W. Sherman, B. F. Goodrich Co., Department Manager, Akron, Ohio; J. A. Christie, Superintendent Swinehart Tire Co., Akron, Ohio; H. M. Glazier, Carmichael Construction Co., Akron, Ohio; R. T. Bailey, City Engineer, Kent, Ohio; J. S. Sneddon, Babcox & Wilcox, Barberton, Ohio; W. B. Ford, 25 Orchard Road, Akron, Ohio; W. D. Spangler, Northern Ohio Traction & Light Co., Akron, Ohio; B. H. Clingerman, Engineer Department, B. F. Goodrich Co., Akron, Ohio; P. W. Litchfield, Factory Manager, Goodyear Tire & Rubber Co., Akron, Ohio; C. N. Hand, Laboratory, Goodyear Tire & Rubber Co., Akron, Ohio; L. G. O'Dell, Manager Crude Rubber, Goodyear Tire & Rubber Co., Akron, Ohio; G. M. Sprowls, Tire Design, Goodyear Tire & Rubber Co., Akron, Ohio; E. C. Gagnon, Technical Service, Goodyear Tire & Rubber Co., Akron, Ohio; W. J. Kelly, Laboratory, Goodyear Tire & Rubber Co., Akron, Ohio; W. P. Keith, Technical Service, Goodyear Tire & Rubber Co., Akron, Ohio; G. A. Sackett, Standards Division

Nichols was toastmaster and with the assistance of the Dinner Committee arranged a most enjoyable evening. A very cordial welcome was extended by Charles L. Holmes, '88, of the Waterbury Club.

During the course of the dinner the annual election was held and the following officers elected as a governing board: President, Arthur T. Hopkins, '97; vice-president, Herbert M. Wilcox, '04; member at large, John C. Bradley, '07; secretary, Roy L. Parsell, '14.

Four teams were drafted to engage in bowling later in the evening. Each team captain was presented with a banner of his team as follows: "Waterbury Watch," "Gumshoers," "Brass Band" and "Gunmen."

All members present were provided with gas masks and tin helmets which were worn while the speakers were at work or when other emergencies arose.

Ernest Pelton was present with a delegation from Hartford who extended an invitation to Saybrook for the annual Clam Bake with Connecticut Valley Technology Association on June 28.

After the Post Prandials had been disposed of, the bowling contest was held. The "Gunmen" were successful both in capturing the team prize and prize for highest individual roller—Herby Wilcox. "Dinny" Chatfield received the prize for being the noisiest rooter.—ROY L. PARSELL, '14, Secretary, care of Winchester Repeating Arms Co., New Haven, Conn.

PANAMA—THE TECHNOLOGY CLUB OF PANAMA had another of the frequent meetings at the Hotel Tivoli, Monday evening, April 28, 1919. Witmer, '08, had just come up from Chuquicamata, Chile, where he was employed with the Chile Exploration Company, and the alumni in the Canal Zone got hold of him and arranged a meeting.

Witmer told many interesting anecdotes of the mines, with which he was connected as an electrical engineer. Among the points were the mixups due to the use of German machinery and odd frequencies, the use of metric sizes on shafting and all machinery, and oddest of all, the use of meter and inches in a level or bench mark elevation. Having spent two and a half years there, he is pretty conversant with the electrical end of it.

After dinner the party adjourned to the porch, where the talk became general. Reinforced concrete, structures, transmission lines and prohibition all came in for a share of the discussion. As the military members of the club could not go into Panama to revive memories of the old "Chapel" the meeting was comparatively dry.

Those present were Witmer, '08, Brooks, '11, Bolton, '16, True, '11, Niles, '17, Green, '16, Grimes, '08, Butters, '01, Raymond, '16, Lieber, '16.

Any Tech men passing through Panama are earnestly urged to call up the secretary, W. F. Grimes, '08, at Balboa 209 and make themselves known. A meeting will be arranged if there is any possibility at all of the traveler staying as long as a day or two.—W. F. GRIMES, JR., '08, Secretary, Balboa Heights, Canal Zone.

PHILADELPHIA—TECHNOLOGY CLUB OF PHILADELPHIA.—On Saturday afternoon, June 7, we held our annual Field Day at the Wenonah Military Academy, Wenonah, New Jersey. The day was a scorcher which probably contributed to the very large attendance. Including wives, sweethearts and Techlets, there were about eighty of us all told.

The afternoon was spent at the Athletic Field and in the baseball game and relay races all the boys were apparently in their old time form. There were also

some spectacular contests by the ladies, including a wood-sawing contest, the winner of which was Mrs. D. K. Bullens.

There was a goodly turnout, but Alden Walker, Tech 1939, deserved the prize for being the youngest. He got it in the form of a silver napkin ring, which, incidentally, apparently did not appeal to him nearly so much as the cotton batting in the box in which it was packed. He finally did consent, however, to hold it long enough to have his picture taken.

Although this was the first time in twelve years that Field Day has been held anywhere but at the Woodbury Country Club, the general consensus of opinion was that the Wenonah Military Academy was a most excellent substitute. Field Day ends our activities of the year until the fall.—MARSHALL B. DALTON, '15, Secretary, Liberty Mutual Insurance Co., 22 South 15th Street, Philadelphia, Pa.

PORTLAND, ME.—THE TECHNOLOGY ASSOCIATION OF MAINE.—Twenty-eight members of the Technology Club of Maine met at the Falmouth Hotel, Portland, on the evening of March 24. Professor A. E. Kennelly had kindly consented to be present and gave a very interesting talk. Mr. F. W. Freeman, '01, demonstrated his very marked ability in the drawing of caricatures. The meeting was very enthusiastic and it was the general opinion that the Maine Club would continue its meetings at more frequent intervals and that a large attendance was assured.—J. A. WARREN, '91, Secretary, Cumberland Mills, Me.

URBANA—TECHNOLOGY CLUB OF THE UNIVERSITY OF ILLINOIS.—The Tech men and women at the University of Illinois meet at noon on the second Saturday of each month for lunch at the University Club. During the war we formed an alliance with the Worcester Tech alumni here at the University which has been so satisfactory that we shall probably continue to hold joint meetings with the alumni of our sister institute.

Since the first of the year we have lost our former secretary, Professor E. A. Holbrook, '04, who has gone to Washington as acting Chief Mining Engineer of the Bureau of Mines. In the meantime we have gained Capt. H. E. Babbitt, '11, who was in France for more than a year in the Advanced Section, Service of Supplies, and who had a wide experience in the Divisional Training Areas.

A detailed account of Babbitt's exploits will be found elsewhere in this issue under "News from the Classes."

Along with Babbitt came Lieut. H. F. Ferguson, '12, who was engaged in the same service in France. In fact, we can claim still another overseas man in Capt. Paul Hansen, '02, as one of our former members here at Illinois. Hansen likewise was in the A. S., S. O. S., and although he is now back in this country we have not yet seen him at Illinois.

Dr. E. W. Washburn, '05, divides his time between the National Research Council in Washington and the Department of Ceramic Engineering here at the University.

Professor F. H. Newell, '85, has recently been elected president of the young and rapidly growing American Association of Engineers, succeeding in this position Mr. W. H. Finley, Chief Engineer of the Chicago and North Western Railroad. The association is giving special attention to the economic problems of the engineers, to questions of salary, wages, conditions of employment and everything which affects the engineer as a man and citizen; leaving to the older societies the more technical questions in which they have already made a notable success. The applications for membership in this association have been coming in at the rate of a

thousand a month and Newell as president will have his hands full in keeping up with the demands for conferences on the innumerable questions arising in all parts of the country. He is planning to visit the principal centers where engineers are employed and to give special attention to the men in public employ, Federal, State, county and municipal, including engineering educators, who are among the poorest paid members of the profession.

The club is rather proud of the fact that every one of its members took some part in wartime activities, including its only woman member, Miss Isabel Bevier, head of the Department of Household Science. Miss Bevier's work in the Food Administration in Washington was probably as effective as that done by any of us who did not go overseas.—ARTHUR C. WILLARD, Secretary, University of Illinois, Urbana, Ill.

BOOK REVIEWS

THE LETTERS OF DINSMORE ELY, '18, ONE WHO SERVED. A. C. McClurg and Co., Chicago, 1919.

Probably no Technology man in the war had his name made known to so great a number of people at large as did Dinsmore Ely, '18. He and he alone was quoted in Congress, in the press, editorialized about, used to stir the pulses in Liberty Loan advertisements—gained, in a word, a kind of immortality comparable a little to Rupert Brooks' and Major Whittlesy's. And yet Dinsmore Ely did nothing that thousands of boys of his age did not do. He never saw active air fighting; he died, as so many did, from an accident. Many Tech men accomplished more than he in the war; he alone gained such a fame.

This volume of letters tells the questioner why he gained his glory. This volume is an everlasting testimony that the pen is mighty, perhaps mightier than the sword and the machine. Dinsmore Ely had the gift of literature. Years might have made him a good engineer, but a native talent and a great opportunity made him a phrase-maker, whose phrases will not readily be forgotten. "Like a Liberty Bond, it is an investment and not a loss when a man died for his country." These words—the genuine literary quality of them—were no accident. Every letter now published, written to his people at home, shows that. They are undoubtedly the best writing that any Technology man connected with the war has produced. They stand in the front rank with all that college men have written. And so this boy, who seemed to have done so little, has really done so much, so much more than his friends and college mates, living and dead, who worked and fought and lived as sincerely—but whose lips were sealed, who had not the gift of speech.

The letters are charming—boyish, exuberant, vivid, picturesque, often poetic in the best sense. He saw clearly and he thought about what he saw. His accounts of his practice flights have seldom been bettered, even by professional writers, for pure sense of actuality. He saw the French people, too, and he loved and appreciated them—as so few of our Americans have done. And in his last letter, written when his death was quick upon him, it must have been some little touch of prophecy, some "feel" of the future, that made him end with his phrase which already seems to have taken on a little of the glory and immortality of Rupert Brooks' sonnet and Foch's message at the Marne.

Technology produces little literature, it makes few phrases. It would be better known, greater, more useful to the world, if it did—if its men who did things well could tell about them as well. They leave that to a few men like Dinsmore Ely—and Dinsmore Ely thereby becomes to all the rest of the world the symbol, the vivid, speaking symbol of what all his efficient, tongue-tied brothers are worth.

R. E. R.

WITH "E" OF THE FIRST GAS: by Private Robert B. MacMullin, at present an undergraduate of the Institute. Privately printed.

A very interesting book, written by Mr. MacMullin not so much for the public as for his company mates in the First Gas and Flame Regiment, and therefore full of all the homely touches, the personal bits, the recollection of well remembered little things that makes a war book vivid and real, different from the usual set report.

The book contains not only this personal day-by-day account of the troubles of the company in training and their belated arrival in France and their few engagements, but it also has a concise, rapid, non-technical description of the work of that branch of the service, which is the best the reviewer has seen. It also contains drawings by MacMullin, verses from his pen, and some interesting photographs. All in all, it is well worth reading. It may be procured from Mr. MacMullin himself, in care of this magazine. We cannot help quoting, to give the flavor of the book, the author's verses written in Virginia during the long training months:

"THE GAS FLAME"

Ain't it a shame, ye boys 'at came
At the call o' the trumpet ter fight the game
O' War an' Death in our country's name,
And joined the famous "Gas and Flame,"
Ter have ter sweat in Virginy's sun
A-wastin' time when the War ain't won,
While our pards is fightin' like sons-o'-guns
Across the Pond ter halt the Hun?

Talk o' blood an' iron, an' sniper's pie—
Why, the most we do is swat the fly,
An' bunk fatigue in a canvas sty
With a 'skito bar fer a lowly sky.
Now what the Hell in the summer time
Is the good uv an O. D. woolen blouse
That swathes yer up like a bloomin' louse
When the mercury's out fer a record climb?

An' three lectures a week on etiquette,
While strategy's not been thought uv yet;
An' buryin' the food yer haven't et,
A-starving the pigs an' the animal pets.
Oh, they's chlorine and phosgene and mustard oil,
But I guess it ain't accordin' ter Hoyle,
Fer the issuin' gas from the Colonel's post
Is what we have ter contend with most.

I guess it's enough ter make yer sore,
This naggin' an' raggin' an' laggin' some more,
An' drillin' a man till he's stale before
He gets his chance ter fight in the War.
Now if it's true, as the officers claim,
That ter-morrer's the day the "Gas an' Flame"
Pack up fer France,—why ain't it a shame
It's ALWAYS ter-morrer,—an' who's ter blame?

PRIV. ROBERT BURNS MACMULLIN.

FORT MYER, VA.

THE COLLEGES IN WAR TIMES AND AFTER, by Parke Rexford Kolbe. New York: D. Appleton and Co.

Any one who is interested in what the colleges as colleges did in war work will be interested in this full, carefully compiled and illustrated work. The author is president of the University of Akron and in government service during the war. The part Technology played is touched on, not as fully as we might wish, but considering the great scope of the work and the number of collegiate institutions in America, pretty fairly adequately.

CAMION CARTOONS, by Kirkland H. Day, '17, IV. Boston: Marshall Jones and Co.

Another Tech man has set out to conquer a new field in the literature of the war, new, that is, to Technology men. A bit like "Dere Mable," a bit like Ring Lardner's letters home from "Al," yet it differs enough to make it well worth reading. The letters and accompanying sketches were written home with no thought of publication, and therefore miss happily that strained and often artificial humor which betrays a professional funny man at the front. The pictures are perhaps the best part of the book, which is rightly called "Cartoons." They deal with all the humorous little anxieties and megrims and desires of the man in service, his wish to go home, his delight in presents, the weariness of routine, the curse of top sergeants, the lure of French wine, French girls—everything except French tobacco. Any one who remembers Day's humorous drawings in *Technique* and the *Woopgaroo* and the *Voodoo* will want a copy of the book.

BUSINESS LAW FOR ENGINEERS, by Calvin Francis Allen, Professor of Railroad Engineering, Massachusetts Institute of Technology. McGraw, \$3.

The book is divided into two parts, one entitled "The elements of law for engineers" and the second called "Contract letting." The contract section is quite similar to that in other books of this type. The first section, however, on elementary law, is very much clearer and more definitely stated than is usually the case with legal texts written for the benefit of the engineering profession. The chapters take up not only those sections of elementary law which are obviously applicable to engineering, but others of the apparently less related subjects which, however, are shown to bear upon engineering work. The chapter headings, for instance, are: Evidence, Contracts, Torts, Equity, Real Property, Corporations, Agencies, Master and Servant, Sales, Negotiable Instruments, Railroads, The Engineer's Legal Relations With Others. The author is professor of railroad engineering in the Massachusetts Institute of Technology.

A convenient and useful compilation, giving essentials condensed or elaborated when necessary. Part two is especially good in its suggestions for the advertisement, bidding, uniform contract form with alternative suggestions.

The book seems very complete and goes well into detail without, however, being full of legal technicality. The layman can easily grasp its contents.

Throughout the book a remarkably simple and clear system of arrangement is used, and the value is enhanced by well-thought-out typography. Apparently every effort has been made to leave out extraneous matter such as is common in legal books, for, although Professor Allen is a lawyer, he is primarily an engineer.—ENGINEERING NEWS RECORD.

APPLIED MECHANICS, by Charles E. Fuller, S. B., and William A. Johnston, S. B., Professors of Theoretical and Applied Mechanics, Massachusetts Institute of Technology. Vol. II: Strength of Materials. New York: John Wiley & Sons, Inc. London: Chapman & Hall, Ltd. Cloth. 6 x 9 in.; pp. 556, illustrated; \$3.75 net postpaid.

Considering the fact that very little space is devoted to discussion of tests or the physical properties of materials of engineering, and that centers of gravity and moments of inertia are not included, this volume of five hundred and fifty-six pages seems unnecessarily large. In part this is due to the inclusion, at the end of each chapter, of a large number of illustrative problems, which are generally most excellent. The methods of the calculus have been employed throughout, perhaps to a greater extent than is customary, and mathematical refinements of theoretical calculation of stresses are given which are sometimes unwarranted by the assumptions made in the premises as to the properties of the materials and the conditions met with in structures. It should be noted that the authors state in the preface, "As preparation the student should have a knowledge of differential and integral calculus, the principles of statics and dynamics, and the methods of determining the centers of gravity and moments of inertia of areas and solids."

The first chapter is devoted to a discussion of the physical properties of materials, but very little is given on the results of tests. It is followed by a chapter on analysis of stress and strain, a theoretical discussion of the relations of stress intensities acting on a particle in various directions, and including the ellipse of stress. Chapters on uniform stress and uniformly varying stress and stresses in beams give the ordinary theory of flexure. In the discussion of riveted joints no mention is made of the fact that in a riveted joint the friction is the principal resisting medium and that in good work the frictional resistance between the plates is seldom overcome. The chapter on the general theory of flexure includes beams with unsymmetrical cross-sections, acted upon by oblique loads.

Combined stresses, Chapter VII, might better be discussed after Chapter IX, on columns, and should include the article in that chapter which treats of the strut or tie subjected to combined axial and lateral loading. The treatment in Chapter VII is only approximate, neglecting the effect of the deflection of the member, and might be omitted without loss.

In the chapter on arches and catenaries, after giving the equations for the reactions of arches with two hinges and without hinges, expressed in the form of integrals, the authors develop at great length the reactions for arches of uniform cross-section in which the axis is the arc of a circle. This may be good mental gymnastics for the student, but as these conditions are almost never met with in practice, and seldom attempted, it seems that the work would have been much more valuable if the axis had been made parabolic and the section variable, as in the usual case.

The last chapter, treating of reinforced-concrete beams and columns, contains the derivation of the usual formulas for simple beams, T-beams and columns, based on the straight-line assumption. The system of notation is fairly uniform throughout and conforms in the main to current usage. It would be a great help in using the book as a reference if a table of notation were given to obviate the necessity of searching through the text for the meaning of a letter or symbol.

As a text-book for class instruction, this new work may be satisfactory if supplemented with data and lectures on tests of materials, but as a reference book for the practicing engineer it does not promise to be of any great value. —CLYDE T. MORRIS, Civil Engineering Department, Ohio State University, Columbus, Ohio.

GAS MASK ABSORBENTS, by Arthur B. Lamb, '02, Robert E. Wilson, N. K. Cheney. Presented at meeting of American Electrochemical Society, New York, April, 1919.

This article gives a bird's-eye view of all the work done under the auspices of the Chemical Warfare Service on the development of absorbents for gas masks. The peculiar requirements of gas mask absorbents are discussed in detail, and the reasons for the use of a mixture of charcoal and soda lime are pointed out.

The use of charcoal as an absorbent is discussed in great detail, taking up the effect of different variables (temperature, pressure, other gases, etc.) on absorption by charcoal, the chemical action of charcoal, the structure of charcoal, and the preparation of active charcoal. Tables are given comparing the efficiency of charcoal made from different sorts of wood and also those used by the different belligerent nations.

The charcoal made by the United States at the close of the war was several times as efficient as that used by any other country.

A similar discussion is given of the soda lime, which is the other absorbent used in the gas mask canister, in which the function of each of the five different components in the soda lime is pointed out, its behavior in the canister discussed and suggestions made as to the modifications of this soda lime for general industrial purposes. The soda lime is also shown to be much superior to the corresponding chemical absorbents of the other belligerent nations. — PROF. ROBERT E. WILSON, Department of Chemistry, Major Chemical Warfare Service. May 17, 1919.

TEXT-BOOK OF ADVANCED MACHINE WORK, prepared for students in technical, manual training and trade schools, and for the apprentice and machinist in the shop. Edition 4. revised and enlarged. R. H. Smith, Massachusetts Institute of Technology. 648 pp. Industrial Education Book Co. \$3.

New edition of one of the very best books on machine shop practice. Valuable to teachers of technical and industrial education and to operators of machine tools. The matter is presented in a practical manner and exceptionally well illustrated with line drawings.

Author writes from many years' teaching experience in the Massachusetts Institute of Technology.

HISTORY OF CHEMISTRY, by Forris Jewett Moore. (International Chemical Service.) Illustrated, \$2.50. McGraw.

"The aim," Professor Moore says, "has been to emphasize only those facts and influences which have contributed to make the science what it is today." The last two chapters, which respectively trace the rise of physical chemistry and set forth, though briefly, the present state of knowledge of radio-active substances and the influence of such new knowledge on conceptions of the atomic theory, bring the story down to the present day. The matter includes within the space of two hundred and seventy-one octavo pages an account of chemical ideas from the times of the Greek philosophers down to the latest conclusions concerning the elements from X-ray spectra and atomic numbers. The book is based on talks to the author's classes at the Massachusetts Institute of Technology, where he is professor of organic chemistry. Illustrated with forty-six portraits of leaders in chemical research.

The book is written in a brisk and lively style. The illustrations are all well meant, and many are interesting, but the portraits given are of very unequal merit, and some of them are, to speak frankly, quite bad.—BOOK REVIEW DIGEST, WHITE PLAINS, N. Y.

NEWS FROM THE CLASSES

1868

ROBERT H. RICHARDS, Secretary, 32 Eliot Street, Jamaica Plain, Mass.

The secretary went to the meeting of the A. I. M. M. E. in New York in February and while there he met quite a large number of Technology men who are all filling their places in a fine way. In March he had a bad cold that held on for nearly a month and he and Mrs. Richards and Miss Jameson, the latter having a bad cold also, made the trip to Florida. There they made Jacksonville their headquarters and from there visited St. Augustine, Pablo Beach and Atlantic Beach, and Mandarin on the St. John's River. On the voyage down they saw the sea turtles in the Gulf Stream and in Florida they heard the story of how the sea turtles come up the small rivers, crawl out on the sand, dig a hole and lay two hundred to three hundred eggs, and then go back to the sea.

They saw something of the orange blossoms and the oranges on the tree at the same time. They saw one of the alligator farms with one alligator fourteen feet long whose age by computation was eight hundred years, and they saw the thousands of little alligators that had just been hatched out from eggs. It appears that the alligator farm realizes its profit more by the sale of the alligator skins than from the visitors, and the showman pointed out the different pens, saying "the skins from that pen are suitable for making gripsacks, and from the other, suitable for purses and small handbags" and so on through the list.

They also saw the ostrich farm and the trained ostrich that was put through the various stunts of hauling a buggy, and of being ridden after the fashion of horseback. They heard the tale of the marital relations of the ostriches, which are said to be remarkably constant. The husband and wife are always faithful to each other, but there happened to have been the day before we arrived a falling out between a husband and wife and the husband had kicked the wife out of the pen, so that the wife was out in the path where the visitors go. As far as could be made out, they were making up their quarrel at the time of the visit and were talking to each other over the fence.

They heard one story about an alligator which illustrates the extraordinary quickness of these apparently slow-moving monsters. There is a park in front of the Windsor Hotel which has a pool in it and a great big alligator. At the time of the story the alligator had crawled out and was up against the fence which surrounded the area. A lady brought her little dog out to see the alligator and she unwisely, as it appeared, lifted the dog up over the alligator's head, and he wriggled out of her hands, and before he reached the ground he was down the alligator's throat.

Nathaniel W. Appleton writes the following concerning himself and family, under date of March 20:

My brother's wife, Mrs. William C. Appleton, returned from severe work among the French and American wounded in France. For over a year, day and night among the most seriously wounded men, she did the work of utmost unselfishness. She went across for the American Fund for French Wounded, but whilst in France worked also for the Red Cross Society.

Five days after her return she died from cerebro-spinal meningitis.

In France at the same time was my brother's only boy, W. Channing Appleton.

He was an aviator and at the end of the war he came home from the places of great danger, without a wound or sickness.

I was too old to go to the war, could not have stood camp life or the marches or the trenches, but I told the head men of the town I live in, that if there was any place where I could work in and be a help to the United States near home to call on me. I practiced rifle shooting, so that if in need of me I could at least shoot and hit the mark at a long distance.

February 23 my sister's son, Henry Appleton Knowles, thirty-five years old, died in his sleep. He had a few months before returned from France, where he worked for the Red Cross among the wounded and crippled soldiers, where, never shirking his duties, his health broke down and he had to come back to Boston.

These people perhaps you have never heard of, but they represent a very large class of heroes of America, aye, and of other countries.

Kindness, thoughtfulness, tenderness, love, these are the things that uplift the people of all worlds, that show the true religion, that make lasting happiness.

I am glad that those of the class that met at the class dinner had a good time and found pleasant memories to talk about.

In a day or two I shall be at what is called Mt. Lebanon, the place I own, two and a half miles from Hollis Street, East Pepperell.

1870

CHARLES R. CROSS, Secretary, 100 Upland Road, Brookline, Mass.

The secretary of the class has been elected president of the Elizabeth Thompson Science Fund.

The present is also the twenty-second year of his service as chairman of the Rumford Committee of American Academy of Arts and Sciences.

1872

C. FRANK ALLEN, Secretary, 88 Montview Street, West Roxbury, Mass.

Edgar Upton is farming again, having cut loose from the Bureau of Standards at Washington, where he did good service during the war. He is at St. Thomas' Mission, Mill Spring, North Carolina, in "quasi settlement work" among the mountains. He has charge of some one hundred and twenty-five acres which he is to develop along educational lines. Forty acres under tillage. He has acquired a leveling instrument and a text-book on surveying to help in his work. He is temperamentally of the type to fit in with these people, of whom he says, "The people are splendid, given half a chance, and so charmingly warm-hearted and polite that it is more than a pleasure to help them in any way."

Walter Shepard has retired; the following extract from the "Springfield Republican" gives the essential facts:

Boston, March 30—After forty-four years of continuous service in the engineering department of the Boston and Albany railroad, Walter Shepard goes on the pension list tomorrow, having reached the retirement age of seventy years on March 1 last.

Mr. Shepard was born March 1, 1849, in Dorchester, when it was a separate town. He was educated in the Dorchester grammar and high schools and the Boston Latin School and was graduated from Harvard University in the class of 1870, having for one of his classmates the late Gov. Robert Wolcott. He then attended the Massa-

chusetts Institute of Technology, from which he was graduated in 1872, and in June of that year he entered the employ of the Boston and Albany railroad as an engineer's assistant. For a short time he was employed in the Brookline water works, in the engineering department, but returned to the service of the Boston and Albany railroad on March 25, 1875, and has been continuously in the employ of that railroad since that date, a period of forty-four consecutive years.

He was promoted to division engineer in April, 1882, was made assistant chief engineer in December, 1886, and became chief engineer in November, 1891. He served as chief engineer until May 1, 1908, since which time he has continued in the service of the road as consulting engineer. It was under the direction of Mr. Shepard that the work of lowering the tracks through the Newtons was consummated, and he directed the building and construction of many important bridges and structures now in service on the road.

He lives at 79 Bloomfield Street, Dorchester.

The secretary has put out the second edition of his book on "Business Law for Engineers," which seems to be catching hold properly now that the war is over.

1873

SAMUEL E. TINKHAM, Secretary, The Warren, Roxbury, Mass.

Word has been received that Felton's very able administration of the military railway organization both here and overseas has been recognized by the award of the Distinguished Service Order, he being the first civilian to receive this hitherto purely military order.

Frank N. Brown died at his home in Brooklyn, N. Y., on August 1, 1918. Captain Brown was for many years connected with the Quartermaster's Corps of the United States Army and latterly has been stationed in New York City.

1874

CHARLES F. READ, Secretary, Old State House, Boston, Mass.

No report from the secretary.

The news of the death of George B. Frye, III, of Tacoma, Wash., has recently come to the REVIEW office.

1875

E. A. W. HAMMATT, Secretary, South Orleans, Mass.

The only items of class news which I have heard since the date of the annual meeting are a report of the death of Tom Plimpton, said to have been found dead in his car on February 22, 1919, and a letter from Bill Edes, who has been quite sick and is now waiting for the necessary appropriations before returning to Alaska for the season's work.

Hibbard is at present a gentleman of leisure, having severed his connections with the George Lawley & Son Corporation.

1879

FRANK G. STANTIAL, Secretary,

Care Cochrane Chemical Company, 148 State Street, Boston, Mass.

The 1919 meeting and dinner of the Class of '79 was held at the Walker Memorial, Monday, June 9. Eleven members: Messrs. Barton, Cabot, Cutler, Garratt, Gooding, Haseltine, Howe, Little, Sargent, Smith and Stantial were present. There was a marked absence of the war feeling so pronounced at the previous meeting and the old Sunday School jokes and stories passed around the table as in days of yore. Dame Nature furnished the usual storm with electrical accompaniment.

The hour before dinner was spent in wandering about the Memorial and dormitories and noting the difference between the old and new ways of raising men. A new little bit of rhyme wafted in from Pittsburg:

I'd like to see the fellows
And hear Sargent work his bellows
On Phil Little's song,
But, like the road to Tipperary
When the Fates are contrary
The trip's too long.

W. H. R.

The song went all right, the dinner went all right and the glass contained substance in Gooding's package functioned properly. No business was transacted except the election of officers: President, Charles S. Goodwin; vice-president, George F. Blake; secretary, Frank G. Stantial; business committee, Henry G. Hall and F. L. Smith.

A special student of '79, Miss Laura B. White, died on May 21, 1919.

Maj. Harry M. Montgomery is back on the job as city engineer of Evanston, Ill. He was discharged from service February 15, 1919.

1880

GEORGE H. BARTON, Secretary, 89 Trowbridge Street, Cambridge, Mass.

I should be glad to keep the class of '80 on the map, were there any possibility of doing so, in every issue of the REVIEW. I have really given up sending out notices of any kind to the class members who still survive. As far as graduates are concerned just fifty per cent are dead, the remaining fifty per cent being alive so far as I know. Once in a while I run across Hamilton or Miller, both of whom are in Boston, but neither has the least interest in the class or in Tech so far as I can learn in talking with them. I have tried in vain to get them out to any Tech functions. Chase is still in Denver, Colo., and whenever I hear from him I give his data to the REVIEW. I am still in charge of the Teachers' School of Science, having desk room in the Natural History Building, Boston, as that is the normal office of the school. My work in the school is carried on in the Rotch Building at Harvard University. In spite of the war conditions of the last few years the school has kept up well and all its departments have been well attended.

On June 30 I start for a trip to Alaska, taking a party of eleven or more to study the geology of the country and places on the way. We stop at Banff, Lake Louise

and the Illecillewaet Glacier on the way. In Alaska we go as far as over the White Pass and into the Lake Atlin region. On the return trip we visit Mount Rainier, Portland, Ore., with its beautiful scenic highway up the Columbia River; spend five days in the Yellowstone Park; visit the Garden of the Gods and Pike's Peak; and finally end with a day at Niagara.

My son, Donald C. Barton, Ph.D., H. U., and Sp. '11 at Tech, has just arrived home this morning after nearly two years in France and Germany. He served as meteorologist in the Signal Corps with the final rank of M. S. E. My daughter, Radcliffe '14, who was in the Ordnance Department at Washington till after the armistice, is now in Fall River with her husband, Harold F. Eastman, formerly lieutenant in Aviation, and now back in his old position with Stone & Webster.

1881

FRANK E. CAME, Secretary, 17 Metcalfe Apartments, Westmount, Montreal, P. Q.

FRANK H. BRIGGS, Assistant Secretary, Hotel Puritan, Boston, Mass.

Zimmermann has been on a big job since 1911, building a \$10,000,000 penitentiary for the State of Illinois. In 1916 he took his son and son-in-law into partnership, "and therefore hanging up the harness the greater part of the time—only taking hold of the rudder occasionally—have leisure to travel, play, read, write, study, etc.—and F. H. R. M."

1883

HARVEY S. CHASE, Secretary, 84 State Street, Boston, Mass.

"No notes"! No interest. No interest. No notes! Figuring war profits taxes has absorbed entire attention of '83, apparently! Not a whimper from any on 'em.

1884

HARRY W. TYLER, Secretary, M. I. T., Cambridge, Mass.

THIRTY-FIFTH ANNIVERSARY REUNION (1919)

Committee: Messrs. Bridgman, Dearborn and Gill.

Copy of preliminary notice was sent out in March to members of the class by committee, with return postal cards. A second notice was sent May 23. Hotel booklets sent at later dates to those expected to attend.

THURSDAY, JUNE 19, WALKER MEMORIAL, 1 P.M.

Present: Appleton, Bridgman and Mrs. Bridgman, Coburn and Mrs. Coburn, Dearborn, Fitch, Gill, Holder, Hooker and Mrs. Hooker, Lyle and Mrs. Lyle, Pres-

cott, Puffer, Tyler and Mrs. Tyler, Ward, A. W. Whitney and Mrs. Whitney and W. M. Whitney.

IN THE AFTERNOON Whitney took the distant members, his namesakes and the Hookers for a drive to Concord and Lexington. The others occupied themselves in an inspection of the Walker Memorial and in a visit to the main Institute building, paying their respects incidentally to Professor Cross.

IN THE EVENING, twelve attended the Pop Concert at Symphony Hall. Appleton, Bridgman and Mrs. Bridgman, Coburn and Mrs. Coburn, Dearborn, A. W. Whitney and Mrs. Whitney, W. M. Whitney and daughter, Tyler and Mrs. Tyler.

FRIDAY, JUNE 20. Ten reported at the 10.45 train for Gloucester, where Colonel and Mrs. Lyle had preceded them the night before. Six more followed in the afternoon. The day was showery but the afternoon was interestingly spent in inspecting two of the fish-packing establishments of the Gorton Pew Company, where the class were courteously received by Mr. Gamage, the superintendent, and several Technology graduates employed there. The processes of dissection, flaying and elimination of bones, also the mechanical sealing of cans, were observed with much interest, and the somewhat diversified aromas of the establishment did not prove insuperable obstacles to enjoying the subsequent meal at the Thorwald. On the way back to the hotel the company were graciously received by the father and sister of Dearborn at their summer home, situated on a high knoll surrounded by luxuriant shrubbery.

The following twenty were present at the dinner: Appleton, Bridgman and Mrs. Bridgman, Coburn and son, Dearborn, Doane, Fitch and Mrs. Fitch, Gill, Lyle and Mrs. Lyle, Puffer, Stuart, Tyler and Mrs. Tyler, A. W. Whitney and Mrs. Whitney, W. M. Whitney and W. A. Whitney. After a stroll on the beach the company gathered in the hotel parlor for a so-called business meeting, at which all parliamentary rules were shamefully violated and the intolerable political methods characteristic of the present administration were ruthlessly employed (no reference to Atlantic City is intended). Interesting and very welcome letters were read from the following absent members: French, Jarvis, Otis, Pratt, Boardman, Bunce, Bardwell, Bonillas, du Pont, Johnson, Newell, Rich and T. W. Robinson.

The following little poem from a member of the staff of the Thorwald was read with much appreciation:

A REUNION

Linking together the old and the new
Bringing old friendships back into view,
Scanning the miles that have stretched out between,
Days when no gray hairs on heads could be seen.

Linking the friendships of long, long ago,
Into the life that the older years know,
Forgetting the toils and the struggles they've met,
And almost believing they're thoughtless boys yet.

Noting the old-time gestures they knew,
Recalling the jokes and the scrapes they went through,
Memories discarding all save the one thought:
"What solid foundation for life old Tech wrought!"

Parting—they feel that their youth's been renewed,
As the dear old-time fellows these scenes have reviewed.
Voting to come to the Thorwald next year,
Knowing the visit will make for good cheer.

Bridgman, as chairman of the committee, gave a very clever monologue on the League of Nations.

SATURDAY, JUNE 21. Eighteen of the party under Dearborn's escort made the beautiful trip around Cape Ann by trolley. The day was fine and there was opportunity for a short stay in Rockport, with a photograph by Fitch.

After luncheon most of the party found themselves obliged to come back to town by various trains.

Du Pont has recently received two more distinctions: one his election as president of the Alumni Association, in succession to Mr. Henry A. Morss ('93); the other, his appointment, by Police Commissioner Enright of New York City, as Special Deputy Police Commissioner for the Borough of Queens.

The secretary's attention has also been called to an interesting illustrated article in the "American Magazine" in November, 1918, "Are You a Job-Holder or a Result-Getter — A talk with General du Pont about the kind of men he picks for big jobs."

The secretary has received an interesting pamphlet from C. S. Robinson, vice-president of the Youngstown Sheet and Tube Company, on "Representation for Labor." The pamphlet discusses the plan of the Youngstown Sheet and Tube Company aiming "to provide effective communication and means of contact between the management and the men on matters pertaining to industrial relations, and to insure justice, maintain tranquility, and promote the common welfare."

George E. Clafin, a vice-president of the Electric Bond and Share Company, died suddenly April 18 at Atlantic City, where he had gone for the Easter holidays. Mr. Clafin was a pioneer in the electric light and power industry. He was born in Providence, R. I., April 4, 1866, and was graduated from the Massachusetts Institute of Technology in 1888. He entered the service of the Westinghouse Electric and Manufacturing Company, and was connected with some of the earliest electric generating stations in the country. He then helped to organize the Franklin Electric Company, of Kansas City, Mo., which built and equipped electric light plants throughout the Middle West. He was later a member of the firm of Lewis & Clafin, Consulting Engineers, of Providence, R. I. In 1904 Mr. Clafin became associated with the United Electric Securities Company of Boston, and in 1913 he was elected a vice-president of the Electric Bond and Share Company.

Lieut-Col. Benjamin W. Guppy, who has returned to his old position as engineer of structures on the Boston & Maine Railroad, after serving for two years in Europe, was the guest and speaker, April 22, at the monthly meeting of the Traffic Club of New England at the Copley-Plaza. Colonel Guppy spoke on "Railroad Construction on the Western Front." He is a graduate of the Officers' Training School at Plattsburg and was commissioned a major when the War Department organized an operating regiment from among the railroads of New England. As major, he commanded one of the battalions. His command was brigaded with the British Expeditionary Forces and during his service he won advancement to the rank of lieutenant-colonel. Seventeen months of his foreign service were with the 14th Engineers, and the remainder with the Service of Supplies.

1887

EDWARD G. THOMAS, Secretary, 213 Floyd Street, Toledo, Ohio

Thirty-two years looking ahead in 1887 seemed almost an unnecessarily long span of life, but look backward from 1919 and our student days seem but a short

time ago. So when the call came for the boys to gather at the old spot—Young's—for our annual dinner, the response was immediate and universal. Thirty men came together to renew old friendships, talk of old times and detail the records of late years. There were Patterson, Spaulding, H. S. Adams, W. A. Whitney, Carter, Kendall, Nutter, Solomon, Tripp, Gay, Very, Taintor, Fish, Sever, Hobart, Lane, H. D. Sears, Hathaway, Kirkham, A. L. Cushing, Mulliken, Fred Thomas, Hildreth, Merrill, Brett, Carleton, Crosby, Brainerd, Bryant and Cameron.

After an old-time regular Young's Hotel dinner, our collection of stereopticon pictures of scenes from 1883 to 1919 was shown, letters and wires from Sturgis, Shortall, Coombs, E. G. Thomas, John Adams, Granger, Whitney, McCall, Barton, Fogg, Cornell, Cooley and Holmes brought the spirit of '87 from the unfortunates who couldn't come, and the stories of war work from those who, in the service or civilian positions, helped to down the Kaiser, made a long evening pass all too quickly. Eighty-seven is much indebted to Taintor for his energy in attending to the affairs of this very successful meeting.

Dr. James W. Greeley is now in Palestine on Red Cross work.

Dr. Fred P. Gulliver passed away February 8 in Philadelphia, of pleurisy and pneumonia.

R. E. Schmidt was appointed last summer a member of a commission to lease existing buildings which could be turned into army hospitals, having carte blanche to spend \$15,000,000 if needed. After the armistice was signed the commission was reappointed to arrange for the cancellation of the leases and supervise the necessary financial adjustments.

Granger Whitney spent a year and a half in the coke bureau of the fuel administration in the work of investigating costs and fixing prices. To our dinner he sent the following poem:

COKE

I

The filler on his larry weighs the iron ore and stone,
 The skipman hoists the loaded skip which dumps itself alone;
 The keeper stops the tap hole, and the monkey man the notch.
 The helper runs the iron and the engineer is Scotch.
 The runner man lifts up the gates to let the metal flow,
 The blower watches everything for it's his job to know
 That everything works properly from tapping hole to smoke,
 But he'll never blow the furnace unless you give him coke.

II

There are steel rails and wire fence, solid shot and shrap,
 Ship plates and boiler plates, little guns and big,
 Roughing rolls and finishing to bloom and finish up
 Soaking pits for heating and a mixer for the pig.
 Dolomite and silica for open hearth and Bessemer,
 Ingot moulds and spiegleisen, checker work and smoke,
 Bronze tuyeres and fire brick, iron ore and fluxing stone,
 But you'll never get combustion unless you have the coke.

III

Mining is a job of work and coking is a trade,
 And men have put their minds to it, for there the money's made;
 So let the corporation that has seen the business grow
 Have an eye upon the future lest it see the business go.
 Forget the dollar of today until the war is won,
 Lest your orders come from Prussia and your boss turn out a Hun;
 For if we do not win this war you surely will go broke.
 So forget your little profit and hustle out the coke.

IV

The division superintendent has a trench line to defend;
 The track gang are the sappers from terminal to end.
 The president's the general and should let his colonels know
 That what's good for Pennsylvania is an aid to B. & O.
 The dispatcher is the signal man—he surely earns his pay;
 The train men are the soldiers and it's theirs to win the day.
 But cars will never leave the shop, nor engine turn a stroke
 If the miner and the burner don't get out the coal and coke.

V

The battleship's a bulldog; the cruiser is a hound.
 The destroyer is a beagle pup that chases all around.
 The submarine's a water dog and he's a dirty pup,
 And the little trawler waits around to beat the beggar up.
 And they all protect the troopship with the lads who do the work.
 So, Johnnie in the coal mine, you have no time to shirk,
 While your brother's in the trenches you should strike a lusty stroke
 For a ship will never leave the ways unless we have the coke.

VI

There are steel rails and wire fence, solid shot and shrap,
 Ship plates and boiler plates, little guns and big;
 Roughing rolls and finishing to bloom and finish up,
 But you'll never fill the mixer up unless you have the pig.
 There are dolomite and silica for open hearth and Bessemer,
 Ingot moulds and spiegleisen, checker work and smoke,
 Bronze tuyeres and fire brick, iron ore and fluxing stone,
 But you'll never win this little war without a little coke.

The secretary has learned with deep regret of the death of Fred C. Todd, which occurred during the winter at his home in Baltimore. It is hoped to present a record of his life in the next REVIEW.

O. S. Hussey has been busy as a civilian in the Ordnance Division, War Department, since May, 1918, having in charge the contracts for furnishing heavy field artillery to the army. At present he is preparing a review of the commercial operations connected with the building of these guns as a permanent record for the information of the War Department in the future.

F. D. Carney, formerly general superintendent of the Pennsylvania Steel Company and general metallurgist of the Bethlehem Steel Company, and Lewis B. Lindemuth, formerly assistant superintendent of the Bessemer and Open Hearth Departments of the Pennsylvania Steel Company and superintendent of the Electric Furnace and Crucible Departments of the Bethlehem Steel Company, announce that they have formed the partnership of Carney & Lindemuth, Consulting Engineers and Metallurgists, with offices at 40 Wall Street, New York.

1888

WILLIAM G. SNOW, Secretary, 95 Milk Street, Boston, Mass.

The secretary regrets to be obliged to record the death of our classmate, George E. Clafin, which took place at Atlantic City on April 18. He had been there recuperating, went back for further rest and appeared to be improving until shortly before the end which came suddenly. Clafin was always with us on reunions and class cel-

embrations when possible and his presence at these gatherings will be sorely missed. Claflin was born in Providence, April 4, 1866. While in Technology he was Editor-in-chief of 1888's "Technique" and later was connected with the Technology Quarterly. He served four years as class secretary. On April 18, 1894, he married Miss Susie E. Talbot, who survives him.

His life was an active one. In August, 1888, after graduating from the Department of Electrical Engineering he went to Hartford, Conn., with the Waterhouse Electric Co., bought out later by the Westinghouse Electric Co. In November of that year Claflin went to Pittsburgh from which place he made trips to the South and West, also to Havana, Cuba, inspecting plants, especially those in course of erection. In 1889 he was made district engineer, with headquarters in St. Louis and traveled through the West. He left the Westinghouse Co. in November, 1891, and organized the Franklin Electric Co., with William H. Blood, Jr., '88. He spent three and a half years in this and installed numerous municipal and lighting plants in Missouri, Iowa, Nebraska, and other places. This company specialized in the erection of electrical fountains.

Early in 1896 the company dissolved and in April of that year the engineering firm of Lewis & Claflin was established at Providence, R. I. The firm was appointed electrical inspectors and experts for the Insurance Association of Providence. From 1900-03 Claflin was engineer and manager in charge of reconstruction of railway, light and power systems of the Asheville (N. C.) Electric Co. In 1904 he became engineer for the United Electric Securities Co. of Boston, and was engaged on investigations and reports of Public Service Corporations. While acting in this capacity he had charge of the construction of the Omaha Electric Light and Power Co., Omaha, Neb.; was director and engineer in charge of construction of the Winona Railway and Light Co., Winona, Minn., and served in a similar manner in connection with the construction of the Jamestown (N. Y.) Light and Power Co.

Claflin's activities continued along these lines and in 1913 he was elected a vice-president of the Electric Bond and Share Co., with headquarters in New York. In this position he was in general charge of the operation of all the electric power, light and gas properties under the management of this company. He was a director and a vice-president among other companies of the American Power and Light Co., the Idaho Power Co., the Lehigh Power Securities Corporation and the Utah Securities Corporation. He was a member of the Bankers, Engineers and Technology Clubs of New York.

The following article was recently published in "The Tech" but very likely escaped the notice of some '88 men, therefore it is reprinted below:

Louis A. Ferguson, vice-president of the Commonwealth Edison Company, Chicago, has just completed thirty years of service with the company and its antecedent companies. Mr. Ferguson has spent his entire business career as a central-station man. Promptly after graduating from Technology he entered the employ of the Chicago Edison Company. After serving in the underground department and in the trouble department, he was assigned to the electrical engineer's office, and in 1890 he became electrical engineer for the company. In 1897 he was appointed general superintendent in charge of all the electrical engineering, construction, operating and contracting of the company. Upon the formation of the Commonwealth Electric Company, Mr. Ferguson was made its general superintendent. In 1902 he was appointed second vice-president of the Commonwealth Electric Company and the Chicago Edison Company. Five years later these companies were consolidated under the name of the Commonwealth Edison Company and Mr. Ferguson was elected second vice-president. In 1914 he was elected vice-president in charge of contract, operating, construction and electrical departments, a position which he still holds. To Mr. Ferguson belongs the credit of being the first central-station engineer in the United States to recommend the system of generating three-phase

alternating current for distribution over transmission lines to sub-stations containing rotary converters to transform the energy into direct current for general distribution. He has made three trips to Europe to study engineering development there. One of these investigations of European practice resulted in recommendations to the Chicago Edison Company that it adopt the differential rates now so largely employed. Mr. Ferguson is a past president of the Association of Edison Illuminating Companies, the National Electrical Light Association and the American Institute of Electrical Engineers. During the war he has been a member of the Federal Capital Issues Committee and other war bodies.

Maj. Fred J. Wood has recently been stationed at Camp Devens, Mass.

Col. Sanford E. Thompson who has been with the War Department in Washington in the Ordnance Department has returned to active work in his profession now carried on under the name of The Thompson & Lichtner Co. of Boston and New York, consulting engineers in management, accounting and construction; their New York office at 25 Pine Street is in charge of Maj. Brinton Buckwalter.

Col. George D. Moore of the 20th Infantry, United States Army, is now located in Washington.

Maj. Theodore F. Laist is now in the Karpen Building, Chicago, Ill.

1889

WALTER H. KILHAM, Secretary, 9 Park Street, Boston, Mass.

So important an occasion as the thirtieth anniversary of the entrance of the class into civil life was fittingly observed by twenty-seven members at the Wianno Club, whose luxurious appointments contrasted most favorably with the somewhat rough and ready appointments of previous hostelries which have had the honor of accommodating '89.

The mobilization occurred quietly and without seriously interfering with the public convenience, and twenty-two members gathered around the table on Friday night, the others arriving during Saturday. Weather conditions were perfect, making possible a swim on Saturday morning for all those who had bathing suits. The program, which offered continuous loafing as its main attraction, was studiously followed by most of the guests, though a foursome composed of Bosworth, Hobbs, F. L. Pierce and Williston persisted in a brave attempt at golf, whether for exercise or to justify the very striking and handsome golf costumes which they sported is open to question.

The dinner on Saturday evening was naturally the climax of the whole affair and provided an opportunity for the class to testify to its love and respect for Billy Thurber, the president, by presenting him with a suitably inscribed silver bowl. Billy was overcome by surprise but was able to make it clear that the occasion was also the twenty-fifth anniversary of his marriage, and the bowl, while deeply appreciated for its original purpose would likewise come in very handy as an excuse for his absence from home at that time. Jap Whiting, who made the presentation remarks, asked that Billy bequeath the bowl to his two sons who were in the service in France, one of whom was seriously wounded in saving the life of a soldier, while the other one was awarded the Croix de Guerre for a similar action.

Juddy Wales then awarded citations to each member present, accompanying each with an original verse appropriate to the character and peculiarities of the recipient. This so moved the members that Juddy himself was made the recipient of

a beautifully bound bright red volume on Temperance which must have cost not less than fifty cents in Hyannis and was replete with interesting matter on this topic.

Major Edward Y. French, just back from overseas where he has been engaged in the work of protecting Uncle Sam's vast plants and stores against fire, spoke interestingly on his experiences, and later the class adjourned to the casino for relaxation. Here a motion to have a class election which had been rashly introduced was smothered by the administration's steam roller and the unfortunate movers had to content themselves by a petition for a reunion every year, which was forgivingly taken under consideration.

The crowd melted away in detachments on Sunday, the reunion being officially over when the secretary and treasurer departed in Kunhardt's automobile.

So ended the thirtieth reunion.

Col. Sanford E. Thompson is one of the recent additions to the staff of the Thompson & Lichtner Company, consulting engineers, Boston, Mass., with a New York address at 25 Pine Street.

Before being called into the service, Maj. Clayton W. Pike was engaged as an expert by the Public Service Commission of Pittsburgh to consider a reduction of electric lighting and power rates of that city. As a result of the efforts of the commission a new and much lower schedule has been adopted and the major feels greatly pleased in having been largely instrumental in obtaining this reduction.

Henry Howard has returned from a cruise to Bermuda in his yacht during the months of March and April.

1890

GEORGE L. GILMORE, Secretary, Lexington, Mass.

Charles Hayden was elected one of the governors of the Rocky Mountain Club, at its dinner at the Waldorf, in New York, April 8.

In a letter received from Billy Poland, under date of March 24, from Paris, where he is director for Europe, for the Commission for Relief in Belgium and Northern France, he states:

Our work in the liberated regions of France is still going on, hammer and tongs. As far as the feeding is concerned, we shall probably turn this over entirely to the French within three or four months, but the building of temporary barracks for the soldiers, and the construction of dispensaries and hospitals in the wrecked region, child welfare work, etc., will probably go on for some time after that.

Prof. W. Z. Ripley is expected to deliver a course of lectures on "Labor Arbitration," in August, at the Labor Union College of the Boston Central Labor Union, recently established.

An appropriation of \$500,000, to promote fundamental research in physics and chemistry, was announced in March by the Rockefeller Foundation. The fund, to be administered by the National Research Council, will be utilized to support during a five-year period several fellowships whose holders, working in the laboratories of co-operating universities, will turn over to American educational and industrial institutions the results of their investigation.

The plan, expected to build up a continuously expanding corps of expert investigators, will be put into operation by selection of a group of "Fellows," scientific college graduates especially adapted to research and of an age (twenty-five to thirty years) when "imagination and creative powers are at their best."

The fellowships, according to the announcement, will lead their holders to important posts in industrial laboratories or to professorships in colleges, create more favorable conditions for research in American universities and lay the basis for more effective national participation in the sharpened industrial competition anticipated with the advent of peace.

The plan will be administered by Professors Bumstead of Yale, Kohler of Harvard, Millikan of Chicago, Noyes of the Massachusetts Institute of Technology and Bancroft of Cornell; Drs. Simon Flexner, director of the Rockefeller Medical Institute, and George E. Hale, '90, director of Mt. Wilson observatory; members of the research fellowship board of the National Research Council.

William R. Peyton's address is 1605 East 2d Street, Duluth, Minn.

"Chic" Waite, who was lieutenant-colonel in the Engineers on the other side during the war, has returned to this country, and is now with the Lord Construction Company, at 105 West Fortieth Street, New York. "Chic" was one of the first engineers sent to Coblenz. He was on the other side of the Atlantic thirteen months.

At the alumni dinner, March 1, 1919, at the Walker Memorial, the following were present from the class of '90:

Batchelder, Borden, Burley, Bartlett, Boss, Brownell, Collins, De Wolf, Gilmore, Goodwin, Kendall, Sherman, Roots, Rogers, Tilson, Whitney.

Pierre S. du Pont has resigned as president of the E. I. du Pont de Nemours & Company. Irénée L. S. du Pont, chairman of the Executive Committee, becomes president of the company, and Pierre S. du Pont becomes president of the Board of Directors. These changes became effective May 1.

Dr. Gary N. Calkins, zoölogist at Columbia University, was elected a member of the National Academy at the session held in Washington, April 30.

Charles W. Sherman served as 1st lieutenant in the Massachusetts State Guard, Company F, 11th Regiment Infantry. He was also a member of the Public Safety Committee of the town of Belmont and engineer on housing projects, United States Housing Corporation, at Newport News, Va.

W. L. Creeden's address is Room 405, Daly Bank Building, Butte, Mont.

G. L. Gilmore sailed from New York on the "Baltic" May 15 in a commission to arrange for a World's Cotton Conference to be held in New Orleans in October. He will probably return the last of July.

1891

HENRY A. FISKE, Secretary, 275 West Exchange Street, Providence, R. I.

The Class of '91 held its twenty-eighth annual reunion on Saturday, June 28, at the Rhode Island Country Club, Nayatt, Barrington, R. I. Most of the men met at the University Club in Boston at nine-thirty in the morning, going over the road in automobiles, and the following men sat down for dinner at one-thirty: Arthur Alley, Stephen Bowen, Robert Burns, Henry G. Bradley, Jere Campbell, Bernie Capen, Billie Dart, Edward Earle, Arthur Hatch, Henry Fiske, Gifford Thompson, William Punchard, Billie Palmer, Morrill Ryder, Jim Swan and Harry Young.

After dinner a very exciting golf tournament was played by the younger members of the class while the others made up the gallery. At six o'clock they all motored home after a very enjoyable day.

Ryder is State Representative from Middleboro.

Jere Campbell told some very interesting accounts of his experiences in France, as Jere was a major and had charge of construction of docks and handling of material going to the front.

Fiske is now associated with the Automatic Sprinkler Company in Providence.

A letter was read from Major Leeming, who has just returned and is spending the summer at Saranac Lake, New York. He was Chief of Service of Buildings and Grounds in France for the American Expeditionary Forces and had charge of leasing of all land, buildings, docks, etc., and when the Rents, Requisition and Claim Service Department was formed he was made Chief Renting Officer. After the armistice, during November and December, he laid out an area around Le Mans for the billeting of a million soldiers awaiting transportation. In January he was put on the Board of War Damages for the allied countries and was put in charge of the valuation of buildings and lands damaged in France and Belgium. In February he was ordered to Rome to assist the Italian government along the same line.

Ernest Tappan is at Sainte Menehold, France, for the Young Men's Christian Association.

As far as can be ascertained the Class of '91 was represented in the army by the following: Major Campbell, Major Hooper, Major Leeming, Captain Coles, Captain Kimball, Captain Scudder, Lieutenant Henderson.

George A. Campbell reports the arrival of a daughter in his family. Congratulations.—Henry C. Bradley was elected president of the class for the next two years.

1892

GEORGE H. INGRAHAM, Secretary, 2052 Cornell Road, Cleveland, Ohio

CHARLES H. CHASE, Assistant Secretary, Tufts College, Mass.

Capt. Arthur Morton Worthington, Medical Corps, United States Army, is with the Army of Occupation, A. E. F., at Coblenz, on the Rhine.

Frederick L. Francis, an architect, ended his life by inhaling gas at the home of his mother. He had returned from Washington, where he had been engaged in war service, and had since suffered a serious breakdown as a result, it was believed, of overwork. He was forty-nine years of age and leaves a family.

Horace Greeley Lobenstine of 1250 Seminole Avenue, Detroit, Mich., announces for himself and family that by order of the Probate Court of Wayne County, Michigan, he has been authorized to use the English version of his German name, Horace Greeley Preston. Preston graduated from the School of Mechanic Arts in 1888 and from Course IX of the Institute in 1892. After leaving the Institute he became president of the Detroit Leather Specialty Company of Detroit, Mich.

The "American" of New York City, March 5, 1919, announces the appointment of L. K. Sherman to an important post:

The appointment has been announced by Secretary of Labor Wilson of L. K. Sherman, chief engineer of the housing corporation, to succeed Otto M. Eidlitz as director of the Bureau of Industrial Housing and Transportation, the United States Department of Labor, who recently resigned to resume his private business. His experience for the last twenty-seven years has been as an engineer or executive on construction. His offices are in Chicago.

A letter recently received from H. N. Williams tells of his experiences in France. He says:

Am now on my way home and tomorrow will be seventeen months in foreign service, the opportunity for which I am very deeply grateful for. Came over as a captain in the 10th Engineers, leaving New York August 1, 1917. Detached to serve with Training Corps September 26, 1917. Was supervisor since that time in very active railway work, having charge of transportation at the quartermaster depot at Geneva. Was transferred to the Inter-Allied Railway Commission, which works directly under orders of Marshal Foch; in December I was sent to Coblenz, Germany, as president of the Coblenz Delegation of the Inter-Allied Railway Commission, having supreme charge of all German railways on the American front, and including the American bridgehead. This, of course, includes all work of blockading Germany as far as the railways were concerned. It was a wonderful experience; I organized the work, being assisted by some very able subordinates. On account of the death of my mother, I requested relief in order to return home for attention to personal matters (it being no longer absolutely necessary to remain). Relief was furnished in January, and after remaining with my successor to help him all I could, I left Coblenz. I had several splendid visits with Capt. W. R. Kales, '92, at Coblenz. He is with the 4th Aero Squadron, well, happy, and working hard. He certainly is one of Uncle Sam's finest officers. Tried to get to see Feland who is in that region but missed connections when in his neighborhood. I did not have a chance for service in the trenches, but tried to do my share and then some, wherever I was stationed.

1893

FREDERIC H. FAY, Secretary, 308 Boylston Street, Boston, Mass.

GEORGE B. GLIDDEN, Assistant Secretary, 551 Tremont Street, Boston, Mass.

No report received from the secretary.

Notice was received May 26, 1919, from the postmaster at New York, that George T. Hanchett, VI, had died recently.

1894

S. C. PRESCOTT, Secretary, M. I. T., Cambridge, Mass.

The quarter centennial celebration of the graduation of the Class of '94 was held from June 19-22 and proved to be a most enjoyable occasion. Fifty men were present at the different events, and while this number is somewhat smaller than had been anticipated from the early replies, it was a very jolly and agreeable company which met to commemorate events of '94.

The first meeting of the class was a luncheon at the Engineers' Club at noon on Thursday, June 19. Here approximately forty men gathered and spent a couple of hours in renewing old acquaintances and in making plans for the succeeding days. Shortly after two o'clock those who were going to East Bay Lodge at Osterville on Cape Cod were assigned to their respective motor cars and, headed by Nathan Cheney, a procession of eleven cars started for the Cape. The cars remained reasonably near together throughout the whole trip until the Cape was approached, when some of the speeders pulled away from the rest and constituted a committee of welcome and reception when the remaining cars arrived. Two or three stops en route

were made for the purpose of purchasing strawberries and other refreshments, but the whole company arrived at East Bay Lodge in time for an excellent shore dinner. The evening was spent in reminiscence, kelly pool and music, the class developing extraordinary talent in the rendition of certain songs, the most successful being the Stein Song, and The Long, Long Trail and Till We Meet Again, sung at the same time by dividing the class into two groups.

Friday morning the arrangements for the golf tournament were soon under way and practically all the players in the company were entered as contestants for the class championship. Those who did not play golf devoted the morning to tennis, swimming, and automobiling to near-by points of interest along the Cape. In the afternoon more golf was indulged in by a small group, while the remainder sought success in other means of entertainment. Friday afternoon the company was increased by the addition of about ten more members of the class who were unable to go down on Thursday, and under the leadership of R. S. Weston a distinctly musical evening was enjoyed. Incidentally, there were games of bridge and kelly pool on the side, and the non-singers who, by the way, were few, were a highly edified veranda audience and very generous in their applause.

Saturday morning opened with a before-breakfast swim by a considerable number of those present and immediately after breakfast there was a hegira to the golf links where the class championship was to be played off between W. F. Spalding and A. A. Clement. Spalding proved to be the winner by a score of one up. The afternoon was somewhat interfered with by showers, but these did not seriously mar the day and a rifle competition was held in a field near the hotel. Pistol shooting was also indulged in and in the late afternoon a ball game was played between two picked teams, the Blue and the Gray. The quality of the playing is reflected in the score which, according to the official umpire, was 24 to 23 in favor of the Blue, although the Grays claimed the score was 18 to 12 and some of the Blues were confident that it was 14 to 9 in their own favor.

Group photographs were taken on Friday and also on Saturday by F. W. Lovejoy, who was the chairman of the Photographic Section. The golf tournament was arranged by A. B. Tenney, assisted by Cheney, and the rifle shooting and baseball game were conducted by the secretary.

The class dinner was held on Saturday evening with a total attendance of about thirty-five. A number of those who had been in attendance were obliged to leave earlier to connect with trains for New York and the West, but a very enjoyable dinner was had in spite of the reduced attendance. After the dinner an election of class officers was held in which W. H. Bovey of Minneapolis was elected president until the next reunion; S. C. Prescott was continued as permanent secretary, and Cheney and Claflin were made members of the Executive Committee. Following the election of officers, a number of prizes were given out to the winners of the various events. To N. S. Bean, as the class baby, was presented a nursing bottle filled with milk punch; to W. F. Spalding as the winner of the golf championship, a prize of half a dozen golf balls was given, and to A. A. Clement as the contestant having the best score for eighteen holes in medal play, a second prize of golf balls was presented. Consolation prizes for the highest scores were given to Tom Richards and Duckworth. The first prize for singles in tennis was presented to Day and the prize for doubles to Day and Warren. In the rifle competition Tenney stood at the top with a score of forty-four and received the first prize. To the next ten in order were given distinguished service crosses made of steel and tied with class colors, while to the remaining members of the class leather medals were granted. The man having the lowest score, Piper, received also a special prize. The baseball used in the game and inscribed

with the score was presented to Captain Spalding while the members of the team were each given celluloid scorers. The captain of the losing (?) team was presented with a toy ball of beautiful brown and white leather and he was also given a bag of marbles for distribution to the members of his team. A special prize of a toy balloon was given to Day for making the longest hit and another special prize, consisting of a fly swatter, was awarded to Warren for distinguished batting. After the election, the class gathered around the piano and sang numerous songs, including some which had been specially prepared for the occasion.

The reunion has developed a certain amount of latent literary talent, or at least it is making its appearance in the class at this time. Among the contributions are the following special songs which were prepared by members of the class:

TECHNOLOGY FOREVER

By J. W. KITTREDGE

I

(With apologies to Marching Through Georgia)

Gather back to Boston, boys, we'll sing another song,
Sing it to a name that helps to move the world along,
A name that stands for loyalty and honor high and strong,
Old Technology forever.

CHORUS

Hurrah, hurrah, we'll sound the jubilee,
Hurrah, hurrah, the flag that makes you free,
We'll sound the praise and honor of the dear old M. I. T.,
Old Technology forever.

II

We'll gather to the stamping grounds we trod in days of yore,
We'll grasp the hand of friendship we have trusted o'er and o'er,
We'll mark the quad-centennial of the Class of Ninety-Four,
Of Technology forever.

CHORUS

III

We've played this wondrous game of life and always played it fair,
We've shown that we can build a name and build it on the square,
And when the final finish comes, we've shown that we'll be there,
Old Technology forever.

CHORUS

IV

We'll solve our country's problems as our men of honor should,
We'll turn the songs of ancient strife to loyal brotherhood,
We'll prove the Tech a mighty power for universal good,
Old Technology forever.

CHORUS

The secretary also prepared two parodies on popular songs of the day which were apparently appreciated and were adopted as class songs.

TILL WE MEET AGAIN

Here we meet to celebrate anew
Days long past and friendships tried and true.
Raise the flag of gray and blue,
Clasping hands, and then, my comrades,
Ere we part we'll pledge ourselves once more
Loyal e'er to Tech and ninety-four,
To guard their honor evermore,
Till we meet again.

THERE'S A LONG, LONG TRAIL

There's a long, long trail a-winding
 Back to the days now long dead,
 To Chem. and Math. and English Lit.,
 And the old drill shed.
 There were then long nights of boning
 To get a credit or two,
 But we plugged along, and, Ninety-four,
 Good old class, here's to you!

There's a long, long trail a-winding
 Back to the days of our youth,
 When we met at Tech together,
 In the search for truth.
 There have been long years of working
 To make our dreams all come true,
 But we've fought the fight, and, Ninety-four,
 Good old class, here's to you!

Our old friend, Taber, who has for more than a year been laboring in the Ordnance Department in Washington under various difficulties, sent on a poem which is also here reproduced.

EPITAPH OF A BRANCH HEAD

(A daily report will be required of each person giving a detailed statement of his activities for each day. This report is to be handed in not later than 9.30 on the following morning.)

(Extract from instructions)

There was a faithful "Branch Head" once,
 Who worked in Building "B,"
 Each day he did a thousand things,
 A busy man was he.
 And when at last he came to die,
 And left for realms above,
 He started straight for Heaven's gate,
 The land of peace and love.

He knew he'd done his duty well,
 Had early worked and late,
 And so he surely thought for him
 He'd find an open gate.
 But good St. Peter barred the way,
 And to an alcove led,
 And placed a pencil in his hand,
 And this is what he said:

"Why think ye that your home is here?
 I know ye not at all;
 And ere ye walk my golden streets,
 Or eat in my mess hall,
 Ye'll have to prove that ye are worth
 The price I have to pay;
 The times are hard and board is high,
 And going up each day.

"Just sit ye down before that desk,
 And write out one by one,
 And tell for every day in life
 The good that ye have done.
 Ye've got to show the reason why,
 And prove to me your worth;
 So write in detail everything
 Ye did while on the earth."

The Branch Head gasped—he gripped the chair;
 He said out, "Let me in,
 I've ever been a faithful man,
 My life's been free from sin.
 And back on earth in Building B
 The upper floor, Wing One,
 You'll find a million daily sheets
 That tell what I have done.

"I wrote them for the Ordnance there,
 That every one might see
 The things I did for every day,
 But 'twas too much for me.
 I tried to do some useful work
 Each day to fight the Hun,
 But almost all my time was spent
 In writing what I'd done."

"If that be so," St. Peter said,
 "Come in and rest in peace.
 Your life was truly Hell enough,
 Your troubles now shall cease.
 You did your best to do some work,
 To have the victory won.
 I understand—you couldn't—you
 Were writing what you'd done.

"And those who through such trials go
 And perish by the way,
 Can always find a refuge here—
 In peace forever stay.
 Your room is there in Martyr's Row—
 The Upper Floor, Wing One.
 Your epitaph: 'He tried to write
 The things that he had done.'"

A number of the men left for Boston immediately after dinner, the remainder waiting over until Sunday when the reunion broke up. It may be regarded as the most successful reunion the class has ever held and all present were enthusiastic about it and already talking about plans for the next one.

The men who were present at one or more of the different functions were: Adams, Bean, Batcheller, Batson, Beardsell, Bovey, Claflin, Clement, Chace, Cheney, Curtis, Crary, Dana, Davis, Day, Duckworth, Ellis, Ferguson, Hopewell, Hunt, Jenny, Kimberly, King, Klipstein, Lawrence, Lowell, Lord, Lacount, Lovejoy, Moore, Marvell, Owen, Phelan, Piper, Pratt, Pollock, Prescott, Patrick, Richards, Ripley, Reynolds, Spalding, Tenney, Taylor, Weston, Warren, Wood and Wheildon. In addition to these members of the class, Mr. George Stetson was present as a guest and admirably entertained us by his musical ability.

Letters of regret were received from the members of the Faculty, Professors Fay, Norris, George, Bailey and Woods, who were made associate members of the class three years ago. All expressed their great appreciation of the invitation and deeply regretted that other engagements would prevent them from attending the reunion.

McKibben, who has for several years been professor of Civil Engineering at Lehigh University, has resigned to become the head of the Department of Civil Engineering at Union College, Schenectady. McKibben has done notable work in connection with the Shipping Board and has recently written for the Lehigh college paper an interesting article on "Why Portuguese is the Language of Brazil."

* H. H. Johnson is owner and publisher of the "Tacoma Daily Index," the official paper for Pierce County and for the City of Tacoma.—L. S. Greenleaf is vice-president and treasurer of the Manning Abrasure Company of Troy, N. Y.—C. W. Dickey is practicing architecture in Oakland, Cal.—F. A. Schiertz is government chemist, Bureau of Steam Engineering, U. S. N., at Munhall, Pa.—W. V. Brown is manager of the Engineering Societies' Employment Bureau, 29 West 39th Street, New York City.—W. R. Miller is an architect in Portland, Me.—Arthur LaMotte is manager of the Technical Division of the du Pont Company, Wilmington, Del.—C. A. Mead is one of the vice-presidents of the du Pont Company.—D. C. Chaffee has been for the past two years in war service in France, having closed his architectural office in Peoria, Ill., to take up this work.—S. P. Blanc is western manager for the Eureka Fire Hose Manufacturing Company, the Gunwall Fire Alarm Company, and the America-France Fire Engine Company with headquarters in Denver.—E. S. Jenckes is vice-president and general manager of the Joseph Bancroft & Sons Company of Pennsylvania at Reading.—S. H. Thorndike is a member of the firm of Fay, Spofford & Thorndike which had full charge of the engineering of the Boston Army Supply Base, a \$25,000,000 shipping and storage terminal built for the army in 1918.—H. R. Batcheller has been investigating the labor situation for the National War Labor Board at Washington.—Russell Sturgis is a captain in the Sanitary Corps and is sanitary officer at Camp Taylor, Ky.—Nathan Cheney is mechanical engineer for the Stone & Webster organization in Boston.—W. C. Peet is president of Peet & Powers, electrical engineers at 70 East 45th Street, New York City.

A. G. Robb is chief of the Robb Engineering Works, Ltd., Amherst, N. S. His company has been engaged since early in the war making shells for the British government and also for the United States government. They have constructed buoys and apparatus for torpedo nets for the protection of Canadian harbors, have built marine engines for the Canadian and other merchant fleets, and also for the French and Canadian governments.

E. B. Waite is a consulting engineer with headquarters, Lock Box 617, Millbury, Mass.—L. R. Moore is assistant inspector of gas for the Commonwealth.—R. H. Ober is captain of Engineers in the United States army with headquarters at Camp Humphreys, Va.—F. L. Stearns is deputy collector of Internal Revenue with an office at the Custom House, New York City.

Mrs. Mabel Warren Sawyer and her two daughters have been very much engaged in war work at the Technology Work Room, her two sons have also been engaged in war work, one in connection with the railroad administration and the other in war garden work with the United States Boys' Working Reserve.

G. W. Sherman, known as the mayor of Junkville, has done remarkable work in the salvage and by-products department of the B. F. Goodrich Company of Akron.—A. W. Tidd is assistant engineer, Board of Estimate and Apportionment, Municipal Building, New York City.—J. C. Kimberly is vice-president of the Kimberly-Clark Company of Neenah, Wis., manufacturers of pulp and paper.—C. G. Whiton has moved from New Bedford to New York where he is superintendent of the Hudson River Day Line.—E. I. Marvell has been very busy in construction work as mill engineer and architect in Fall River.—H. R. Bates is general superintendent of the International Agricultural Corporation.—L. W. Bugbee is factory manager of One Piece Bi-Focal Lens Company, Indianapolis, Ind.

Warren Jenny, who has been absent from Boston for many years, has returned as an accountant in the War Construction Work at Squantum and South Boston.

T. P. Curtis and F. W. Lord, The Lord Electrical Company, have installed a

large amount of power and electrical equipment on twenty Ferrys type wood ships for the United States Shipping Board.

G. A. Taber has been engaged as an expert in the Ordnance Department, following the production of heavy artillery and preventing delays and increasing the efficiency in the production of ordnance equipment.

W. H. Bovey is president of the Dunwoody Institute in Minneapolis, where seven thousand men have been trained for the navy and three thousand for the army during the past two years.

E. C. Klipstein is an architect in the Chemical Building, St. Louis.—L. Dana is vice-president and general manager of the Charter Oak Stove and Range Company, St. Louis.—C. G. Abbott has gone to South America to take observations on the eclipse of the sun.—G. R. Beardsell is partner in the following concerns: Gardner & Beardsell Company, W. H. Foss Company, Inc., P. G. Smith Company, Inc., is also director of the Central National Bank of Lynn, the Lynn Mutual Fire Insurance Company and a trustee of the Lynn Five Cents Savings Bank.

J. G. Estey is president of the Estey Organ Company, Brattleboro, Vt.—J. L. Nesbitt is secretary and treasurer of the J. P. Williams Land Company, Tallahassee, Fla.—H. S. Duckworth is resident manager of the Garner Bleachery and Print Works Company, Garnerville, N. Y.—G. L. Mower is electrical engineer with the General Electric at the Pittsfield works.—H. F. Copeland is manager of the White Oil and Petrolatum Division, L. Sonneborn Sons, 262 Pearl Street, New York City.

1895

WALLACE C. BRACKETT, Secretary, 105 Washington Street, Boston, Mass.

The secretary is making a strenuous effort to get "news" from different members of the class, but with indifferent success. Out of letters sent to twelve men, three replies were received; a second letter brought two more, and a telephone message brought one more, or a total of six out of twelve. Only one letter was returned for wrong address, showing that five men received two letters each to which they paid no attention. Can't we better this record? Please answer the secretary's letters at least so that we can know that you are alive.

A communication from Booth, the class president, has just been received and reads as follows:

It has been found impracticable to hold a class outing this year, but plans are already being made for next year's outing. This will be in celebration of ninety-five's twenty-fifth anniversary, and it is expected to make this outing worthy of the occasion.

Charlie Parker is about to return to his office, having recovered from his recent illness. We shall all be glad to see him around again.

Azel Ames, having been discharged from the service, has returned to his work with the Kerite Wire Company. He writes as follows:

I was called into service with the Coast Artillery Corps, N. G., N. Y., on June 15, 1917. Drafted into the army of the United States with the same organization as major on August 15, 1917. Served at Fort Wadsworth, New York, from August 21 to December 31. Attended the Coast Artillery School, Fort Monroe, Va., January and February, 1918. Was assigned to the 61st Artillery, C. A. C., at Fort Screven, Georgia, which was the first railroad artillery regiment organized here for the war. This was later turned into an eight-inch motor-drawn howitzer outfit and I was transferred to the 75th Artillery, C. A. C. Was sent on same duty in the South

Atlantic District where I picked up malaria and pleurisy and was in the General Hospital No. 1, N. Y. C., for two months. My regiment (75th) sailed in September (first week) and after convalescence I was transferred to the 41st Artillery, C. A. C., at Fort Monroe. We were to be ready to sail November 15, but naturally didn't.

Have organized, clothed, trained and equipped for overseas three different battalions of heavy artillery, but didn't get over with any of them. Rather rotten luck seeing that I had handled guns up to twelve-inch for the last ten years. Have been back with the Kerite Company since discharge on January 17, 1919.

Am living at 35 Lake Avenue, Yonkers, N. Y.

Faxon writes the following from Washington:

Have been on war work for the government, in a civilian capacity, since December, 1917, with headquarters here in Washington. Until some time after the armistice, I was supervising inspector of ordnance material, the work I was on covering pressed metal parts, including helmets; also machine tools, and all kinds of miscellaneous equipment not otherwise classified. During 1918 my work for the Ordnance Department took me into many manufacturing plants in the East and Middle West.

For several months past I have been with the machine tool section of the Ordnance Salvage Board, the work consisting of special assignments to provide suitable machine tools and other equipment from ordnance surplus for various other government departments. I expect to stay here until two or three immediate jobs are finished and then take up some manufacturing work again.

Have attended a couple of "Tech" picnics here but no other '95 men showed up.

Ben Donham, for many years in Seoul, Korea, finds New York tame; read what he says. Please note also what he says about free lunches for any '95 man.

I am still located at 52 Broadway, New York City, where I have been for the past seven years endeavoring to make a living as a consulting engineer, financial representative and manufacturers' agent.

Business is very dull and I find plenty of time to play golf. Bill Swift lunched with me today and it would give me great pleasure to buy a lunch for any member of the class of '95, who will take the trouble to call at my office about noon and have a chat about old times.

Aside from the fact that I am president of the Board of Education in my home town and I took part in the various drives for Liberty Loans, etc., I seem to have done very little in the way of service toward my fellowmen. As a matter of fact, I find life in this section of the world rather tame after my more exciting experiences in the early years following my graduation from Tech.

I note that it is the intention to attempt to have a '95 reunion at some accessible point this year, and hope you are making progress with it because I would try very hard to be present at what I know would be a most enjoyable occasion.

Dr. "Jack" Dorrance writes that outside of working for the Food Administration in Washington, operating the plant of the Campbell Soup Company in Camden, of which he is president, and exporting about forty-five per cent of its production to Europe, he has done little or nothing.

From a book recently published giving data about prominent men in New Jersey, we find the following, which really describes what he has done:

Dr. John T. Dorrance, president of the Joseph Campbell Co., makers of Campbell's soups, is head of one of the leading food industries of the world, an industry largely of his own creation. Naturally, he is a conspicuous figure in American enterprise.

As a youth he attended Rugby Academy, Philadelphia, then entered the Massachusetts Institute of Technology, the famous "Boston Tech," where he took his B. S. in 1895. Going abroad he studied at the University of Göttingen, Germany, where he graduated with the degree of Ph.D. in 1897.

Returning to America he joined the Joseph Campbell Company of Camden, N. J., at that time a small concern packing preserves, jams, jellies, canned vegetables, etc. Having mastered the business, step by step, along its original lines, Dr. Dorrance in 1898 conceived the idea of packing soup in condensed form by an improved

method which retains all the original nutriment and flavor while greatly reducing the bulk and the consequent cost of packages and transportation.

This revolutionary idea has been well called a stroke of genius, its effect on household economics throughout the United States has proven a happy one, and beyond question it has exerted a potent and salutary influence on our national dietary and health.

As a result of Dr. Dorrance's sound and vigorous methods applied both to production and commercial development, Campbell's soups today are known wherever people speak English and eat soup.

Dr. Dorrance is an expert in scientific agriculture and husbandry, and devotes much attention to developing improved varieties of fruits and vegetables, as evidenced in the fine conservatories and beautiful gardens of his home at Pomono Farm, Cnaminson, N. J.

Dr. Dorrance is a director of the National State Bank of Camden, N. J., and of the Old Colony Trust Company, Boston, Mass., also the Atlantic City and Port Reading railroads. Socially, being a good mixer, he is a life member of the Manufacturers Club, the University Club and the Philadelphia Racquet Club; also a member of the Country, the Pen and Pencil and the Down Town Clubs, all of Philadelphia, and of the Baltimore Country Club, the New York Yacht Club, and the Midway and Technology Clubs of New York, the Riverton Country Club of Riverton, N. J., and the Seaview Golf Club, Absecon, N. J.

Arthur Canfield writes that there isn't any news in New York. The secretary doubts this and will call on him in a short time to get his proof of this statement.

Allison Owen, we learn from the New Orleans "Times-Picayune," the present commander of the Washington Artillery, is a native Louisianian and the son of the regiment's Civil War adjutant and late commander, Col. W. Miller Owen. He first enlisted in the National Guard of Louisiana in 1890, becoming sergeant of Company A, Fourth Infantry Battalion, and later first sergeant and sergeant-major. In 1892 he was transferred to the Washington Artillery, becoming sergeant-major shortly afterward. In 1897 he was commissioned captain and became adjutant, and in 1909 assumed command of the battalion with the rank of major. In this capacity he served on the Mexican border and when the command was expanded to a regiment he became lieutenant-colonel, July 12, 1917, and was commissioned colonel August 4. In this capacity he has served through the war with Germany.

In civil life Colonel Owen is an architect by profession, having been educated at Tulane University and at the Massachusetts Institute of Technology. He has served as president of the New Orleans chapter, American Institute of Architects, and for several years edited an architectural magazine published in New Orleans. He is a member of the Architectural Examiners and of the Louisiana State Board, architect of the New Orleans Public Library and the municipal office building.

Gerard Swope has just been made president of the International General Electric Company, Inc., which has been formed to develop foreign trade. We quote the following from the Schenectady "Union Star":

Gerard Swope, who resigns as vice-president of the Western Electric Company to assume the presidency of the I. G. E. Co., Inc., was graduated from the Massachusetts Institute of Technology in 1895, and after a year in shop practice with the Western Electric became designing engineer in the power apparatus engineering department. After organizing the St. Louis branch in 1901 he became its manager, and in 1906 was transferred to Chicago as power apparatus manager. In 1908 he became general sales manager, with New York headquarters, and was elected vice-president in 1913.

Frederick A. Wood, lecturer in biology at the Massachusetts Institute of Technology, is the author of an interesting article recently published in the "Journal of Heredity" and subject of an editorial in the New York "Tribune" in which he produces a great deal of historical evidence to prove that despots are largely the products of the breeds of kings, this having especial reference to the late kaiser.

A letter just received from Sid Clapp, from Grand Gorge, Delaware Co., New York, states that he is still connected with the New York Water Works, engaged in digging an eighteen-mile tunnel under the Catskill Mountains to divert the Schoharie Creek into the Esopus Creek, one of the principal sources of water supply for New York City, thus augmenting the supply for some years to come.

Frank A. Bourne on Friday, October 18, 1918, became the temporary head of the Fine Arts Department of the Boston Public Library. The following is taken from the Boston "Transcript":

It is expected that under Mr. Bourne's direction the Fine Arts Department will take on a new lease of life and find favor with a class of people who heretofore may have been unacquainted with its resources along architectural lines. Mr. Bourne is a graduate of the Massachusetts Institute of Technology of the class of '95. He received his master's degree the following year when he made a design for a free port of Boston to be located in Dorchester Bay, his place singularly enough including the territory now occupied by the Victory Plant. His design included the idea of covered piers, which were not then popular, but are today in common use.

Soon after his graduation he became interested in the Fine Arts Department of the Public Library and he has since then given much time, principally evenings, to furthering its work. Now, however, he will give a large part of his time, both day and evening, to the department, but this does not mean that he will relinquish his offices in the Mason Building.

Accompanying please find a list of '95 men who were in active service in the army and navy. This list is not entirely complete and the secretary will be pleased to have any additional names which have not been included, and also corrections and additional information regarding the names included.

ABBOTT, LOUIS A.	Captain	Ordnance Corps
AMES, AZEL	Major	Coast Artillery Corps
AULTMAN, DWIGHT E.	Brigadier-General	Field Artillery, A. E. F.
BOEDEKER, JOHN	Captain	Coast Guard
BURKHALTER, DENISE W.	Captain	Engineers (Ry.) A. E. F.
CHURCHILL, PERCIVAL M.	Major	Engineers, A. E. F.
CLAFLIN, WILLIAM B.	Captain	Engineers, A. E. F.
DENSON, HUGH C.	Captain	Coast Survey
GAY, CHARLES M.	Captain	Engineers
GREGORY, JOHN H.	Captain	Sanitary Corps
HODGE, BENJAMIN	Major	Red Cross, Germany
KEMBLE, PARKER H.	Lieutenant	U. S. N. R. F.
KOTZCHMAR, HERMANN, JR.	1st Lieutenant	Coast Guard
LORING, ERNEST J.	Captain	Ordnance Corps
MESERVE, CHARLES A.	Major	Coast Artillery, Fort Banks, Boston Harbor. In France with 60th Coast Artillery
OWEN, ALLISON	Colonel	Field Artillery, A. E. F.
ROBINS, WILLIAM P.	1st Lieutenant	
SHEAFE, HARRY J.	Captain	C. W. S., A. E. F.
STORK, WILLIAM B.	Lieutenant (J. G.)	U. S. N. R. F. (A. E. F.)
STURGIS, RUSSELL	Captain	Sanitary Corps
SWOPE, GERARD	Brigadier-General	General Staff
TILLINGHAST, C. F.	Colonel	Coast Artillery Corps
WATERBURY, CHARLES D.	Captain	Engineers. Died of pneumo- nia, in Washington, D. C., October 9, 1918.
WHITESIDE, GEORGE S.		Medical Corps, U. S. N.

WIGGAN, THOMAS K. H.
WITHINGTON, P. H.
WOLFE, JOHN C.

Major
Major
Captain

Engineers, A. E. F.
Aviation, A. E. F.
Engineers, A. E. F.

1896

CHARLES E. LOCKE, Secretary, M. I. T., Cambridge, Mass.

J. ARNOLD ROCKWELL, Assistant Secretary, 24 Garden Street, Cambridge, Mass.

The biggest item of news is that Rockwell is back from France and that we are to have a class dinner very shortly, at which he will speak. He has kindly supplied the following account of some of the things that he saw and did in France.

Impressed with America's duty in the World War, as soon as opportunity offered, I presented myself for service in the medical department of the army. The Massachusetts Homeopathic Hospital was among the first to organize a Red Cross Base Hospital Unit, and our organization (B. H. 44) was complete and most of the officers commissioned by August of 1917. However, no orders were received to report for active duty until April 3 of the following year. These telegraphic instructions were immediately complied with and two days later we reported at Camp Dix, New Jersey, for duty.

My appointment as chief of the medical service stimulated more than the average eagerness to take up the study of the duties required of such a position. There was ample opportunity at this camp to receive the best of preparation for the work ahead of us and when on July 5 we sailed from New York, under convoy, for the other side, I felt the three months' experience in an army hospital had at least given me some idea of the work in prospect.

It is hardly necessary to comment on the twelve-day trip to Liverpool. It embraced the discomforts and uncertainties that were common to all organizations going over at this stage of the war. Our hospital unit was put in charge of the inspection and general care of the troops on board, giving us some definite duties which relieved the monotony, otherwise unavoidable. The "Ulysses," an English ship, gave us fair mess and in general I feel that we fared quite as well as any of the other sixteen ships in our convoy. To have crossed the ocean safely with only vague submarine scares, in spite of our constant companion, the life preserver, was certainly an auspicious start. The necessarily poor ventilation and close confinement after dark to the cabins, was very wearing, and the sight of land on the morning of July 17, with many submarine chasers, dirigibles and additional cruisers guarding our entrance into the Irish Sea, was a most welcome and thrilling spectacle. Once at Liverpool we disembarked in due time, and marched to a "rest camp." "Rest" implied anything but the true significance of the word. Our days in this camp were quite typical of war conditions, with threatening and weeping skies. However, England holds no patent rights on rain, as our experience in France was even more depressing, as well as dampening, than England's best. Four days in and around Liverpool, with side trips to Winchester and Salisbury, a run across England to Southampton and a frantic rush across the Channel to Le Havre, brought our first chapter to a close.

Our arrival at the "rest camp" in Le Havre, after a five and a half mile march in the rain, was fraught with new sensations as we eagerly awaited the orders that would direct us to our permanent camp which, up to this time, was unknown to us. Two days later we were informed that our destination was Pougues les Eaux, a one-time popular watering place with its many hotels, some twelve miles from Mesves, where the main group of base hospitals was stationed. We were the only unit in this hospital center, which by the way is the geographical center of France, quartered in hotel buildings, the other units occupying new hospital buildings, adapted for greater efficiency, not only in their individual arrangements, but by virtue of their special grouping around "headquarters" buildings. We were notified at this time

that our cases would include sick and wounded officers as well as men, the idea being that these hotels, adapted to hospital work, would offer more agreeable and satisfactory surroundings for the convalescent officer. The weary hours spent in regaining one's physical and mental forces, three thousand miles from home, are at best difficult to account for. We were able to so arrange these hotel buildings, assisted in our work most admirably by the Red Cross, as to bring a touch of home surroundings and comforts to the American fighting man. Without living in a war atmosphere, it is impossible for one to appreciate the eagerness with which these husky youths, but recently from the battlefields, accepted the friendly word and kindly touch of nurse and surgeon. These boys would withstand suffering, accept whatever mess was offered with a smile, and seemed to, for the most part, realize the difficulties, which very much limited the extent of our service.

To those of you who have spent much time in French hotels, it will hardly be necessary to enlarge upon the difficulties presented to us. Suffice it to say that a woefully inadequate water supply, lack of suitable toilet facilities, small, inaccessible, dark kitchens, buildings out of repair, and scattered promiscuously through a small town of three thousand inhabitants, with no communicating telephone system, no heating plants, electric lighting in only a few of the buildings, and the necessary crowding incident to the great demand for beds, made our initial task of preparing for patients a complex one.

Patients were sent in before we were ready for them, much of our equipment had yet to arrive, more than a third of our nurses had been assigned to other units, our surgical teams had been sent to the front. With this much curtailed organization, which had been established on the basis of a thousand-bed hospital, we faced the extreme demands of late September, October and November, under a great handicap. Our greatest census was something over seventeen hundred patients. Every available hallway, stairway landing, shed, and improvised shelter, was occupied. We realized for the first time that Sherman knew of what he spoke, yet we were far better off than the soldiers and officers in the front line trenches and were glad that we could in some way share the hardship of war and do our part toward relieving the sick and wounded. A description of the sick and wounded cases is quite unnecessary, but we took care of every variety of medical and surgical condition found in an army, and from reports sent to headquarters, we feel that our efforts were not in vain.

Our Red Cross organization did magnificent work in supplying our patients with every variety of need at their disposal. The Young Men's Christian Association entertainment organizations were of the highest order and, co-operating with the Red Cross, never failed to give our men excellent entertainments each week. Our professional efforts would have been much less effective but for the benefits derived from this untiring and faithful service.

Up to the time of the armistice, with the indefiniteness of the campaign, it was not difficult to keep the morale of the officers and men intact. With the cessation of hostilities, however, our task suddenly changed from one of caring for the wounded and sick, resulting from fighting conditions, to bolstering up and encouraging men who suddenly relaxed their every nervous, physical and mental control, only to find themselves restless, impatient, and eager to return home. It was then that we instituted the educational and athletic regime, organizing such groups of convalescent patients as could participate in one or another form of physical exercise, and carrying encouragement to those whose convalescence was slower and required a longer time before they, too, could become thus diverted.

As these hotel buildings were leased from the French government at excessive rental, with the close of hostilities we were ordered to prepare to evacuate this attractive town at the first possible moment. Our energies were then diverted to closing up Pougues and moving the hospital to Mesves, where we occupied unfinished, uncompleted buildings. We had experienced much rain and mud at Pougues, but upon arrival at Mesves, with no sidewalks laid and in a rainy season, where there was a daily downfall, our hip rubber boots were in constant service. From the middle of January on, our work practically amounted to nothing but routine "paper work," one of the necessary evils to army service, and during February and March, with constant rumors of "orders for home," we felt much as our chaplain did when he remarked that his morale was "shot to H——." The hardest work we had to do, I verily believe, was waiting, practically two months and a half, without work, with library and equipment packed for a moment's notice, the orders for "homeward bound." During this period, most of our younger officers were transferred to various

army posts, and it became a daily speculation as to who would be the next one to go to the front, or to some special duty in the S. O. S. The ax fell upon my neck the day before we were to depart for Brest. My decapitation was averted only through the friendliness of the acting commanding officer, who interceded in my behalf, and had the order calling me to Boursin as medical consultant for the center, rescinded.

The twentieth of March found us boarding a conglomerate collection of French coaches headed for Brest. At Brest I ran into "Rusty," who was on a day's mission to headquarters, and he never looked better in his life. After two weeks' stay at this much-underestimated debarkation camp, we sailed for the United States of America on the "Graff Waldersee," one of the Hamburg-American steamers just taken over by our government. After a twelve days' uneventful voyage, we slid under the shadow of the Statue of Liberty with the "welcome committee" band playing "Home, Sweet Home," and I never again expect to experience the sensations that came over me. Later, at Camp Merritt, we learned that officers and men alike were wonderfully impressed with the spirit of welcome extended by those of you who were less fortunate than we, in receiving overseas work, and I know I sense the opinion of most of the American Expeditionary Forces in saying that the "stay at homes" played a part less spectacular but just as essential as the man who carried the gun, and without that unselfish spirit, our successes would have never materialized.

April 30 found me a free man. Fully realizing the great undertaking which America decided to shoulder, the question of transportation, supplies of all kinds, training of an army, equipping that army, and the care of that army at war, we should be somewhat charitable in our attitude toward the army and navy program and its fulfillment. However, I feel very much like the officer who telegraphed his wife: "Deloused, discharged, delighted."

Beyond the chance meeting with Le Baron Russell, who, to the best of my knowledge, is still over there, I did not run across any '96 men.

The secretary has also received a notice to the effect that Frank Guptill should now be addressed at the Engineers' Club, Boston, but the secretary has not received any reply as yet to a letter addressed to him there.

Word has been received of the death of Maurice Black, in Detroit, and the secretary has written to Mark Allen, asking for some details, but so far these details have not been received. The secretary hopes to be able to supply a detailed account of Black and his work later.

Another death of which the secretary has received a very belated notice is that of Fred Coburn, which occurred on March 17, 1918. The following account has been kindly supplied by Charley Foss:

Fred Coburn was born in Lowell, January 30, 1873, was educated in the public schools and entered the class of '96 at the Institute where he studied in '92 and '93.

In 1893 he entered the employ of the C. B. Coburn Co., a business established by his grandfather in 1837.

In 1909, upon the death of his father, he became treasurer and general manager of the company and in 1910 became sole owner and manager.

From that time until his death, by good business ability, he greatly enlarged and improved the business.

During the last four years of his life, although he was handicapped by trouble with his eye, which practically amounted to blindness, he remained actively in business until within a few months of his death. During this period he suffered a gradual decline to the end.

Bert Thompson is now spending some of his time in Boston, acting as vice-president of the Parks-Cramer Company, having a Boston office at 1102 Old South Building, Boston, Mass. He is very busy pushing the Merrill Process of fluid heat transmission which makes use of oil as the transmitting agent. The Parks-Cramer Company are the general agents for the Merrill Process. For further details, write Thompson.

Bradley Stoughton paid a flying visit to Boston on April 28, and the Secretary saw him at the meeting of the Boston section of the American Institute of Mining

Engineers on that date. Stoughton is not yet entirely out of war work, but is still in Washington, and reported that he frequently runs across Marshall Leighton there. Speaking of Washington calls to mind that Dr. George K. Burgess, retiring president of the Philosophical Society of Washington, gave an address on "Science and the After-War Period," at the annual meeting of the society held on January 4.

Charley Lawrence was over in Boston on April 16 and brought his son, C. K. Lawrence, who is planning to enter Technology this year.

Another '96 man who recently called on the secretary was W. E. Spencer Deming, who also has a son who expects to enter Technology next fall.

Frank Thanisch writes from Clifton, Ariz., that he has left the Cananea Consolidated Copper Co. in Mexico because of the general curtailment of copper production which followed the signing of the armistice. He is now with the State Highway Department of Arizona and reports that road building is experiencing a boom.

The following changes of address or title have been received:

Capt. Thomas W. Bailey, Kingston, Mass.—Mr. Frank E. Guphill, Engineers' Club, Boston, Mass.—Maj. Robert S. Hardy, 339 South Wilton Place, Los Angeles, Cal.—Mr. Edwin D. Pingree, Box 1485, Providence, R. I.; Maj. John A. Rockwell, 24 Garden Street, Cambridge, Mass.—Capt. James S. Smyser, 30 Chestnut Street, Worcester, Mass.—Mr. Frank A. Thanisch, Post Office Box 938, Clifton, Ariz.—Lieut.-Col. William G. Wall, National Motor Vehicle Co., Indianapolis, Ind.—Mr. John H. Willis, 288 Washington Street, Hartford, Conn.

Joe Knight has reported to the secretary that he is still in Washington the greater part of the time, attending to his duties as counselor for the National War Labor Board. These duties are likely to continue for a few months more at least, and Joe will thus remain a commuter from Boston to Washington during that period. He reports having seen Charley Hyde a few days ago and that Hyde had received his discharge from the Sanitary Corps and was leaving June 12 for California. Hyde, in turn, told Knight that Bakenhus was making his headquarters in Washington, at the present time.

A regular meeting and dinner of the class was held at the Copley Square Hotel on Wednesday, June 25, the following men being present:

Jim Driscoll, Joe Driscoll, L. E. Emerson, Harry Fisk, Harry Gilman, H. G. Grush, G. P. Hatch, F. C. Hersey, Jr., H. D. Jackson, C. E. Locke, W. M. Partridge, M. E. Pierce, M. C. Priest, Johnny Rockwell, N. H. Sanderson, L. H. Tappan, Bert Thompson, Lucius Tyler, A. P. Underhill, Sam Wise.

Various matters were discussed, especially in connection with our next reunion, all of which will be set forth in a circular to the members of the class, but it may be said that it was the general opinion that, if a big reunion of all former Technology men is to be held in 1920, it would not be wise for '96 to attempt to celebrate, at that time, and also to hold another big celebration on the exact twenty-fifth anniversary in 1921. It, therefore, seemed best that we concentrate all our efforts on a big reunion in 1920, sacrificing sentiment a little and working for the biggest possible gathering, even though it would be actually our twenty-fourth anniversary, instead of our twenty-fifth.

1897

JOHN A. COLLINS, JR., Secretary, 67 Thorndyke Street, Lawrence, Mass.

CHARLES W. BRADLEY, Chairman Executive Committee and Acting Secretary,
54 Canal Street, Boston, Mass.

The secretary is in receipt of the following, under date of April 15, from Jere R. Daniell:

Back again to the good old U. S. A. after thirty months in sunny Spain, most of the time just across from Africa, at Cartagena, and the balance of the time in Madrid. We have had many interesting experiences among the "Dons," but at times things were hardly comfortable, as we never knew which way the country would jump. In general, the "ups" were pro-German to the core, and the "downs" pro-ally, while the "middles" were half and half and didn't want to get hurt, anyway. May return during the summer if things are quiet and business in my line looks promising.

Daniell is with the Electric Boat Company of Groton, Conn.

Walter E. Spear writes from Camp Upton as follows:

Have been relieved as Utilities Officer at Camp Upton, the position I have held since October, 1917, but am still retaining the position of construction quartermaster. I expect to finish up in a few weeks. Whether I shall be discharged, as promised, remains to be seen. In any event, I request that all mail be sent to my permanent residence, Merrick, N. Y.

Spear holds a commission as major in the Quartermaster Corps.

Walter Humphreys was elected secretary of the Boston English High School Association at a recent meeting of that organization.

Arthur P. Hopkins, care Candee & Co., New Haven, Conn., contributes the following interesting notes:

I think the response in the last number of the REVIEW to your appeal for class news is very gratifying and I want to congratulate the Executive Committee on results.

From 1912 to 1917 I was manager for the United States Rubber Company of the factory at Cleveland, Ohio. This middle-western experience was a great thing for my family and myself, and we shall always be grateful that we had the opportunity of knowing something of Ohio and adjoining States. Personally, I believe there are more New England people in Ohio than there are in Massachusetts, Rhode Island and Connecticut today. In 1917, however, we were desirous of moving back to New England so that our children might have their college preparatory work in the East, so we have settled in New Haven. I have been made manager of the Service Department of the Footwear Division of the United States Rubber Company, with headquarters in New Haven and an office in New York and Boston. The Service Department includes the functional organization of our footwear and clothing factories and has to do with laboratory control, engineering, modern management methods and industrial relations. We have a variety of schools for developing the men for the various lines of work and have accomplished large results in developing and up-grading the promising men and women of the division. It is the most interesting and important work in which I have had the good fortune to be engaged, and it promises large returns to our company.

I maintain my health, by reasonable devotion to golf and open air sports, and I take a proper interest in the social, civic and religious interests of the community. I am acquiring a well balanced library, and my slogan is "Five miles a day and two books a week."

We regret to learn through E. M. Blackburn, 24 Littell Road, Brookline, of the death of Miss Helen C. Mills, on February 1, 1919.

William W. Locke has sent in to the REVIEW office the sad news of the death, on April 27, 1919, of Miss Harriet F. Locke.

Proctor L. Dougherty writes under date of March 29:

The yellow letter and the three-cent stamp did the trick. I do not wonder you think '97 "yellow" as to class news. Many times have I started to write as to my own bit during the fall and winter, but generally found myself too busy to proceed far until the stamp that could not be thrown away arrived. During the summer I was appointed District Representative in the New York office of the Emergency Fleet Corporation in charge of the educational and training activities with reference to the shipyards having government contracts. While engaged in this work I have met a good many Tech men, among them Desmond, '09, who is the president of the Newburgh Shipyards, Inc. The other day I dined at the Engineers' Club of Philadelphia with Billy Eaton, who is with the Monotype Company. As to my work, a brief description follows:

The Education and Training Section of the Emergency Fleet Corporation was organized under Admiral Bowles, Manager Ship Construction, September 12, 1917, at which time there were thirty-seven steel shipyards and twenty-four wood shipyards employing about fifty thousand men. Instructions were issued to prepare to train men so that the number of skilled workers would be increased tenfold. At the time the armistice was signed eighty thousand green men had been trained into skilled workers, which represented an increase of about three hundred per cent in the skilled tradesmen in the shipyards under the jurisdiction of the Emergency Fleet Corporation.

In order to fit the instructors to teach the learners the yard was asked to select a few of their best mechanics from the various trades who were given a six weeks' course of instruction in the art of teaching their trade by a Staff Instructor from the Emergency Fleet Corporation. All the expenses of the latter were paid by the government. The method used by the Staff Instructors was that previously outlined by Charles R. Allen of Massachusetts.

By this means the Training Department in each shipyard was enabled to turn over a certain number of trained men in the various trades every month to the Production Department. At the Submarine Boat Corporation, for instance, about one thousand men were turned over to production every month who previous to coming to the yard had been policemen, tailors, liquor dealers, waiters, bricklayers, carpenters, etc; in fact, had been in almost every conceivable occupation.

This work proved to be most interesting and was next best to actually going overseas and fighting.

Major Z. B. Adams is in the Medical Corps, U. S. A. He writes:

Have been eighteen months with the A. E. F. in France. Am now in the office of the Surgeon-General, Washington, D. C.

Henry F. Hoit writes from Kansas City, Mo.:

We have recently gone into new offices at 607 Reliance Building, this city, and we have changed the firm name Henry F. Hoit, Successor to Howe & Hoit, to Hoit, Price & Barnes. Mr. Edwin M. Price is a Tech man of the class of '08; both he and Mr. Alfred E. Barnes have been with me for a number of years. It might interest you to know we are now erecting the large Main Exchange Building here for the Southwestern Bell Telephone Company. It is to be a twenty-story structure.

From Ethan H. Howard comes a very good reason why each member of the class of '97 should write in his bit to the secretary:

I am always exceedingly interested in anything about the men in the class and I hear very little in any other way than through the REVIEW. For the last few years my health has not been all that could be desired and consequently I have not been able to attend class reunions and alumni gatherings, and as my home is in the country, I am largely cut off from any news. My life goes on in pretty much the same old rut that it has for some time past. I could take no active part in the war, though my son was in the navy from the time that war was declared. I am still growing fruit at the same old place on Niagara River, and I wish some of the boys could drop in on me during peach season and get a sample of our achievements along that line.

C. S. Koch, '98, in April sent in the news of the death on April 2, 1919, of William Aleck Faxon.

Lucius S. Tyler writes of his work during the war very modestly. He does not consider that his part has been worth mentioning in comparison with that of those who "actually went to it and were a real factor in the war." He writes:

I have very little new to report. I was given a place on the War Industries Board in this region as chief of the Department of Requirements and Sub-Contracts, where my experiences in manufacturing were worth something, or would have been if the war had continued.

The organization was still in process of building when the armistice was signed, but meantime we were kept quite busy as you may imagine since matters pertaining to conservation of materials — priorities in both material and construction — placing, or rather assisting in placing, government contracts in New England, and assisting those not equipped to take direct contracts, to secure sub-contracts, were all handled by our office for all New England, except Connecticut and Western Massachusetts. The restrictions imposed by the government on material made it practically impossible for me to do any business, so I spent practically all of my time with this board from August well into December. I conducted the Fourth Liberty Loan Drive and the United War Work Drive in my precinct — Ward 25, Precinct 5, in Boston, and those were a lot of work while they lasted.

H. M. Loomis writes under date of April 22:

I am now making my home at Eastport for at least eight months in the year, in connection with the sardine canning industry. This is the beginning of my fourth season here in charge of a voluntary system of inspection started by the packers in 1916. The sardine industry is scattered all along the Maine coast so that it means a great deal of traveling which, of course, makes the work very pleasant in the summer months. During the past year the United States Food Administration decided to exercise some supervision and regulation over the sardine industry. After working during the winter of 1917-1918 as an assistant in the Canned Foods Division of the Food Administration at Washington, I was appointed chief of the Sardine Inspection Service in Maine and Massachusetts and our inspectors were made deputies of the Food Administration to carry out the rules and regulations governing that industry.

During the past three years I have made my headquarters in Washington from December 1 until April 1, as the head office of this Association is located in that city.

We regret to learn of the death of Dr. Mortimer Frank. The following is copied from the New York "Times" of April 23, 1919:

Dr. Mortimer Frank, eye specialist, is dead at his home in Chicago from an apoplectic stroke. He was born in Chicago forty-five years ago, and was a graduate of the Massachusetts Institute of Technology and the Medical Department of the University of Illinois.

The "Chicago Tribune" of April 23, 1919, prints the following notice:

Dr. Mortimer Frank, well-known eye specialist, is dead at his home at 1059 Hyde Park Boulevard. He suffered an apoplectic stroke Saturday night and died Monday morning. He was buried today at a private funeral from his home, interment being at Rosehill Cemetery. He leaves a widow, Mrs. Donie K. Frank, and two small daughters, Katherine and Mary Elizabeth.

Dr. Frank was born in Chicago in 1874, and was a graduate of the Boston Institute of Technology and the medical department of the University of Illinois. He was the author of a number of papers on eye diseases and the history of medicine and was secretary of the Medical Historical Society of Chicago. He was formerly a trustee of the Chicago public library.

His library of old and rare medical books, numbering several thousand volumes, has been valued at many thousand dollars, and was the envy of the medical profession of the city.

It is said Dr. Frank never once turned down a case of a person unable to pay for treatment. He was a cousin of Dr. Ira Frank and had offices at 30 North Michigan Avenue.

Arthur P. Hopkins writes the acting secretary the following personal tribute to the memory of Dr. Frank:

I see in a recent number of "The Tech" that Mortimer Frank of '97 is dead. I do not know whether you knew Frank very well, but I got well acquainted with him on a couple of occasions in Chicago and I consider him a very fine fellow. He had high rank there in his line, which had to do with the eye, I understand. He published a number of papers and was president, I believe, of one or two medical societies.

1898

A. A. BLANCHARD, Secretary, M. I. T., Cambridge, Mass.

The secretary regrets having announced in the last issue of the REVIEW the proposed celebration of the twenty-first birthday of the class, but at the time of that writing it seemed so certain that plans were going through that the statement seemed justified. Unforeseen difficulties arose which made it seem better to postpone the event until September. From the number of letters and telephone calls recently received on the subject it is evident that the men of the class want a reunion, and the Executive Committee says that we will have one.

The following mighty interesting letter comes from Harold Jones:

Headquarters, Beau Desert Hospital Center, Base Section No. 2, A. P. O. 705
S. O. S., A. E. F.

April 10, 1919.

Some weeks ago I had a request from you for news and I meant to reply but have kept putting it off because there seemed so little to say. I am still on the job at Beau Desert. We have had nearly fifty thousand patients here during the war and I suppose will continue to do business for several months. I do not expect to get back to the United States for a good while yet, as officers of the regular army are not in the preferred class, when it comes to passage back home. Of course our families don't take kindly to this, but as we made our bed, so we must lie on it. I am in fine health and like France very much and have many friends here now. The only other news I can give you is that I was decorated by Marshal Petain a short while ago with the cross of Chevalier of the Legion of Honor. You might want to know why, which is embarrassing, for I really don't quite know unless they want to acknowledge the efforts I made to keep the peace as "mayor" of a city of twenty thousand in a French community. However, I am not unappreciative of the honor and especially of receiving it personally from Marshal Petain. Please remember me to my friends and let us hope we shall meet at a reunion in the near future.

A recent note from Ernest Russ was on the stationery of the Russ Gelatine Company and the letterhead shows a picture of an extensive three and a half story factory at Westfield, Mass. This is only one branch of Ernest's business, at that, and it will be remembered that at the time of our last reunion six years ago, he was only contemplating starting out independently.

A letter from Charles A. Stickney, formerly of Chattanooga, Tenn., more recently of 54 Franklin Street, New York City, states he is preparing to move to Peterboro, Ont., Canada, where he has purchased a factory and will manufacture motor trucks, tractors and gas engines.

1899

WILLIAM M. CORSE, Secretary, care Ohio Brass Company, Mansfield, Ohio
 BENJAMIN S. HINCKLEY, Assistant Secretary, 177 Park Street, Newton, Mass.

J. B. Ferguson of Hagerstown, Md., sends us the following interesting notes:
 "More than a year ago the firm of J. B. Ferguson & Company undertook the job of supervising engineers on the construction of Camp Abraham Eustis, Virginia, a Coast Artillery affair for the training of officers and men in heavy artillery fire. Being in one of the busiest war localities of the country, the Virginia Peninsula, close to Newport News, Yorktown and Norfolk where extensive construction work was already under way, and also being in swampy land with unattractive surroundings, it was not an easy camp to build. Eight thousand acres of land were purchased in small parcels, surveys of which we had to make at the same time we were carrying on the topographic surveys and construction work. As soon as the construction work was well under way extensive additions were planned, and we were asked to take charge of a balloon observer's school near by and later of the construction of twenty miles of concrete roads from Newport News to Yorktown. You may well believe that we were busy especially because of the difficulty in getting and holding good men on account of the draft and the desire of so many to take an active part in the war.

"A couple of months after the troops came in, I found out that the camp quartermaster was Major C. A. Watrous, M. I. T., '99. He happened to drop into the office to borrow some drafting materials one afternoon. After a little cross questioning both ways, we discovered each other. We had not seen each other since '99, but had little time to talk over the past before the Major was transferred to other duties, but not, however, before he had an opportunity to render me mighty valuable service in the "floo" epidemic, for which I shall always be grateful to him. Last summer at Washington, I also discovered C. E. Smith (Major), who started in with '99, who was in the Construction Division. He had grown pretty plump (as I understand you have) and had lost a lot of hair, so that it took me a little while to penetrate his camouflage. We had several talks which were interesting to me, as I found that Smith was doing rather unusual work in St. Louis.

"Another unexpected encounter in Washington was with Major Bigelow, formerly our commandant. Though I had not seen him for something more than twenty-two years, I knew him instantly. In a conversation with him, I told him how valuable to me his lectures on military science were in the past crisis, for I had reread them on the outbreak of the war. The Major is now with the General Staff, I believe.

"In February I was in Boston and spent some time at the Tech Building and also found time to drop in on Tommy Pendleton Robinson (take your post, sir). Not having seen him since '98, or thereabouts, I spent a mighty pleasant afternoon swapping histories of the past twenty years.

"Work at Camp Eustis is still going on, but will probably be wound up in another month. Work on the concrete roads was suspended during the winter, but will be resumed in April. I think we still have about thirty-five men on our force, several of whom are M. I. T. men. Davis, 1906, was in charge of road work during the summer."

F. L. Lacaff, IV, is with the Holland Furnace Company, Holland, Mich.

At a special term of the Supreme Court held in the Borough of Brooklyn, N. Y., Herman Henry Schmidt was allowed to change his name to Herman Henry Smith.

The address of Prof. Clancey M. Lewis has been changed from Beaux Arts, Washington, to 802 Arctic Building, Seattle, Wash.

Clancey M. Lewis, Course 3, who spent five years in China immediately following his graduation, is keeping up his interest in Oriental affairs as noted by his recent activities in the organization of the Russian Club of Seattle, of which he is secretary. Lewis was also one of the organizers of the China Club of Seattle, was its first secretary and has continued in that capacity since its organization in 1916.

Maj. James H. Walton, formerly of Newburyport, Mass., returned on the "Calameres" from France January 25. He was professor of chemistry at the University of Wisconsin when the war broke out, was commissioned and assigned to the gas service. He went over last June.

The proposed Twentieth Class Reunion will probably be held at the Lake Placid Club, Lake Placid, N. Y., during the week of September 22. Definite announcements will be made from time to time to keep the members of the class informed. The reunion will depend, of course, on the number of men who advise that they can attend.

The Lake Placid Club is especially adapted for this sort of a reunion and is making special effort to secure them. They have made special rates for rooms and athletic sports, which, combined with the probably low excursion fare made by the railroads, should make the reunion reasonable in cost. Those members of the class who have visited the Lake Placid Club are all very enthusiastic about it as a place to hold the reunion.

From the "Electrical Review," Chicago, Ill., of May 17, is taken the following:

Frank F. Fowle, until recently one of the receivers of the Central Union Telephone Co. and formerly consulting engineer, and James R. Cravath, well known consulting electrical and illuminating engineer of Chicago, have formed an engineering partnership under the firm name of "Fowle & Cravath," with offices in the Monadnock Block, Chicago. Both partners are men who have made national reputations in their work and are especially well known in Chicago and the Middle West. The services of the firm will be devoted to investigations, research, design, supervision, management, appraisals and rate cases, in the several fields with which the partners have heretofore been identified.

Mr. Fowle was graduated from the Massachusetts Institute of Technology in 1899, in the electrical engineering course, and then served nine years with the American Telephone & Telegraph Co. in various capacities in the engineering, railway and operating departments, finally serving as manager of the Chicago territory of the long-lines system. From 1908 to 1912, Mr. Fowle was in practice as a consulting engineer, with headquarters in Chicago, during which period he served numerous important interests, both corporate and municipal. In 1912 he went to New York and jointly with Dr. A. S. McAllister was in charge of the editorial department of "Electrical World." In 1913 Mr. Fowle became editor-in-chief of the "Standard Handbook for Electrical Engineers," published by the McGraw-Hill Book Co., and again entered engineering practice, in New York. Early in 1914 he was appointed one of the receivers of the Central Union Telephone Co., in connection with the Read suit, by Judge William E. Dever of the Superior Court of Cook County, Ill., the other receivers being David R. Forgan and Edgar S. Bloom. Messrs. Fowle and Bloom served as the chief executive and operating officials of the system throughout the five years of receivership, until recently discharged by the court in consequence of the settlement of the litigation.

Mr. Fowle is an active member of many technical societies and has served on many of their committees. He was chairman of the Telephony and Telegraphy Committee, American Institute of Electrical Engineers, and has just been made a member of the Development Committee, Western Society of Engineers. He has also just been elected a manager of the American Institute of Electrical Engineers, and re-elected manager of the Chicago Section, Illuminating Engineering Society.

M. Scott Matheson, Course 2, who has been for many years identified with the shipbuilding industry of the Pacific Northwest, recently manager of the Westernman

Iron Works, has joined with Cecil Bacon and purchased the Westerman interests and will continue in the managerial capacity at the Bacon Matheson Forge Company.

W. H. Mandeville writes from Tulsa, Okla., that he is living in the best city in the world and following the oil game over Oklahoma and Texas.

Mrs. A. A. Johnson writes from Washington that Johnson is first lieutenant with the 22d Engineers' Railway and has been in service since August, 1918. He has been in France since September, 1918.

H. K. White writes from New York that this year finds many of the class apparently more or less disorganized or upset as a result of the war, but is in favor of a reunion, preferably deferred to a later date than this year.

Norman P. Rood's address has been changed from St. Louis, Mo., to 2501 Willard Street, Wilmington, Del. He is now connected with the Hercules Powder Company.

1900

INGERSOLL BOWDITCH, Secretary, 111 Devonshire Street, Boston, Mass.

Every member of the class who knew John F. Wentworth will be sorry to hear of his death which took place last winter. The secretary was not informed of it until he saw a notice in the 1901 class news, in the last copy of the REVIEW. He happened to be passing through Rochester, New Hampshire, Wentworth's native town, on the first of June, and was able to obtain a little information about him.

He was taken sick some time last summer and had to give up his position in the Navy Yard at Charlestown. He went to stay with his family at Rochester, hoping that the change of air would do him good. He did not seem to get much better and was unable to resist an attack of influenza. His married sister is going to look after his children and they will probably be brought up with the best of care. Wentworth's father was one of the biggest tax payers in Rochester, and is supposed to have left his children in good circumstances.

Stanley Fitch was on May 1 admitted as a partner in the firm of Patterson, Teele & Dennis, Certified Public Accountants. He has been in the Boston office for some time, and has given courses in accounting at Boston University. He has also done some work of this kind at the Institute. If anybody wants to learn how to balance his check book or make out his income tax return let him go to Stanley. He would be of great use to the class and the public in general if he could persuade the authorities at Washington that it is impossible to make out a form that will cover every point that may come up. This seems to be their object and the result is that nobody knows where they fit in.

Neall announces the arrival on May 26 of William Gray Neall. He thinks that this is the best son he ever had and it must be a fine one judging from what he thinks of the others. He is named after his maternal grandfather. Neall left the service on May 17, and plans to open his office again in the fall. He is taking his family to his farm on the Cape, and will devote his summer to them. He feels that he has been away so much from them that it will take the summer to get acquainted again.

Jim Batcheller moved his family to Mattapoisett for the summer and then left for Alaska for two months. He has been living in Brookline this winter and it is hoped that he will be able to stay near Boston in the future. His family was taken with the flu and Jim had a very bad time with it.

Russell has begun his work as head of the Junior Plattsburg Camp. He expects to have a very busy summer, and is planning to give a very interesting as well as instructive course to the boys who attend.

A meeting of the class secretaries was held at the Walker Memorial on June 12, to discuss the compiling of a memorial volume to those who took part in the war both as civilians and soldiers. The object of the volume is to get a complete record of what Institute men have done to help win the war. A questionnaire is to be sent out and every one who receives it is supposed to fill it out and sign his name to it. If he cannot fill it out let him sign his name and return it so that the committee in charge will know that he has at least received it and is probably too bashful to give to the world an account of the good he has done. This question of returning the questionnaires is very important both from a financial point of view and from the point of view of the secretaries. It is going to cost a good deal of money to send out these questionnaires and if the work has to be duplicated, as it will be if the first paper is not returned, the expense will also be duplicated. The secretaries are to be requested to help in the follow-up work and if the papers come right back the secretaries will not have this work to do and can devote their time to more useful matters. Therefore, fill out your questionnaires and return them as soon as possible after they reach you. Remember that the committee in charge of this work has a great deal more to do than you have and it is only fair to them to do your part and make their work so much easier.

Bowditch was re-elected the class representative on the Alumni Council. He hopes that the class does not feel that it is necessary to have him continued in this office forever, and that his feelings would be hurt if somebody else wanted the job. He will do what he can to help along the work of the Council.

The following changes of addresses have been received:

Mr. Eric W. Bailey, 83 Inman Street, Cambridge, Mass.—Mr. James H. Batcheller, Post Office Box 36, Mattapoisett, Mass.—Mr. Stephen P. Brown, 969 Park Avenue, New York, N. Y.—Professor E. E. Bugbee, Massachusetts Institute of Technology, Cambridge, Mass.—Mr. Frank D. Chase, 645 North Michigan Avenue, Chicago, Ill.—Com. Frederick H. Cooke, Bureau of Yards and Docks, Washington, D. C.—Mr. Carleton Ellis, 92 Greenwood Avenue, Montclair, N. J.—Capt. Walter Hallstrom, Eastern Department, Governors Island, New York.—Col. James C. Heckman, 196 Soldiers Place, Buffalo, New York.—Lieut. Albert S. Merrill, Ordnance Department U. S. A., Room 606 Royal Bank Building, Toronto, Ontario.—Professor Morton C. Mott-Smith, 212 North Harvard Boulevard, Los Angeles, Cal.—Com. Clinton D. Thurber, Bureau of Yards and Docks, Navy Department, Washington, D. C.—Col. George S. Tiffany, 1162 4th Avenue, Louisville, Ky.—Mr. Walter C. Whitney, 1907 15th Street N. W., Washington, D. C.

1901

ROBERT L. WILLIAMS, Secretary, 107 Waban Hill Road North, Chestnut Hill, Mass.

The following is the latest list that the secretary has of 1901 men in the army and navy. We would be pleased to learn of any others. Also we would be glad to hear from these men, giving us an account of their work and experiences:

Capt. W. T. Aldrich, Ord. C.—Lieut. H. F. Benson, N. Am. Motors Co.—Ensign C. Bittinger, U. S. N. R. F.—Inspector H. T. Blanchard, Sig. C.—Maj. R. H. Brown, San. C.—Capt. George I. Cross, Eng. A. E. F.—Capt. M. Estabrook, Ord. C.—1st Lieut. S. Hazlewood, Eng.—Lieut. (J. G.) C. E. Miller, Jr., U. S. N. R. F.—Maj.

J. F. Monahan, Ord. C.—Maj. Ralph Plumb.—A. W. Rowe, Med. C., A. E. F.—Capt. B. E. Schlesinger, C. W. S.—Capt. S. C. Sears, Eng.—Maj. R. L. Shepard, A. E. F.—Lieut. R. H. Stearns, U. S. N. R. F.—Capt. Solon J. Stone, Eng.—Capt. W. W. Walcott, Med. C., A. E. F.—Lieut.-Com. Ralph Whitman, U. S. N.—Maj. L. P. Wood, Eng.

The following is taken from the "Electrical World":

W. I. Bickford, who was elected chairman of the Atlantic division of the Electrical Supply Jobbers' Association at the recent meeting in New York City, has been secretary-treasurer of the Iron City Electric Company, Pittsburgh, Pa., since its organization in 1907. Mr. Bickford was born in Washington, D. C., November 13, 1879. He attended Phillips-Exeter Academy and in 1901 was graduated in electrical engineering from the Massachusetts Institute of Technology. During the following school year he was an assistant instructor in the department of electrical engineering and physics at the Institute. He then became electrical engineer in the office of the supervising architect of the Treasury Department at Washington and in 1903 became associated with the Iron City Engineering Company, Pittsburgh. In September, 1904, he became secretary-treasurer of the company. Mr. Bickford is a member of a number of prominent Pittsburgh business and social societies and for the past two years has been a member of the executive committee of the Electrical Supply Jobbers' Association.

Word has been received from Mr. and Mrs. William C. Arsem of the birth of Xoma Bergin Arsem, April 25, 1919.

With deep regret I have to announce the death of our classmate, William W. Walcott, last March, in France.

The Boston "Transcript" gives the following:

Capt. William Wright Walcott, regimental surgeon of the 101st Engineers, died in France on March 16, so a telegram received in Natick by his sister, Miss Harriet Walcott, from the War Department announces. Captain Walcott's last letter home, written February 20, said that he was well and was looking forward to returning with the Twenty-sixth Division, of which his regiment was a part. A cable later brought the information that he was seriously ill but would probably live two weeks. The cause of his death is not known to his sister, who is the only surviving member of his family. She lives at the old homestead on West Central Street.

Last summer Captain Walcott was wounded by a piece of shell and was gassed, spending a month in a hospital on account of his injuries. He was promoted from first lieutenant to captain. He saw service at Chateau-Thierry, Chemin des Dames, St. Mihiel and Verdun, being in the last-named sector six weeks, at the signing of the armistice.

Captain Walcott was born in Natick thirty-nine years ago, and was graduated from Newton High School, the Massachusetts Institute of Technology and Harvard Medical School. He served as house officer in the Massachusetts General Hospital and eventually engaged in practice, shortly afterward becoming district health inspector under the State Board of Health, which position he held when called to the colors. He was on the medical staff of the First Corps Cadets about ten years, and went to France with the outfit when recruited to war strength, in the 101st Engineers.

Charles I. Auer is located in El Paso, Texas. He is business agent of Le Roy Consolidated Mines Co., of Dos Cabezas, Arizona, and manager of the Maria Mining Co., District Guadalupe, Chihuahua, Mexico.

N. L. Skene is assistant aeronautical engineer for the Burgess Co., Marblehead, Mass.

A. L. Galusha is mechanical engineer in charge of the gas producer department of the Nelson Blower and Furnace Co., Boston. He is the designer and inventor of the Galusha Marine Gas Producers.

Harry F. Benson, formerly chief designer in the turbine department of the General Electric Co., Lynn, is now mechanical engineer with the Deane Steam Pump

Co., of Holyoke, Mass. He is standardizing the company's products with a view to reducing the cost and increasing the speed of production.

John M. Perkins is works manager for Gilbert & Barber Manufacturing Co., Springfield, Mass.

A. C. Jewett is planning and preparation supervisor of the Central Engineering Department and Cartridge Process and Equipment Engineer of the Winchester Repeating Arms Co., New Haven, Conn. He writes:

I see that expenses are \$43.20 and cash on hand \$35.17, so you need \$8.03 to run the year. I am contributing herewith about one-eighth of this. I am glad you are running on so low a basis. I never did think much of spending a lot on organization work of this sort. Instead I favor occasional "get-togethers" that are self-supporting and publicity through the REVIEW. In this connection we ought to have a professional publicity agent of the theatrical type to assist you in warming up the '01 column. Of course news is hard to gather, but about a thousand words on what the secretary is doing each month would do. Who wants the "professional publicity agent" job?

The following changes in address have been received:

John A. Trott, 17 Warren Street, Lexington, Mass.—Francis K. Baxter, 15 Rutger Street, Utica, New York.—Willard W. Dow, care of Stone & Webster, 120 Broadway, New York.—Frederick W. Freeman, 395 Danforth Street, Portland, Maine.—George D. Hall, Dover, Mass.—S. Berwick Miller, care of du Pont Co., Souviers, Colo.—Carlton R. Rose, 2512 Cedar Street, Berkeley, Cal.—Capt. B. E. Schlesinger, 68 Northampton Street, Boston.—Maj. R. L. Shepard, 79 High Street, Newburyport, Mass.—Frank D. Chase, 645 North Michigan Avenue, Chicago, Ill.—George I. Cross, Merrimack River Savings Bank, Lowell, Mass.—Arthur J. Eveland, care of Engineers' Club, 32 West 40th Street, New York.—Angus A. McInnes, 1421 University Avenue, Highbridge, New York.—Capt. S. C. Sears, 702 Walker Bank Building, Salt Lake City, Utah.—Lieut. R. H. Stearns, Bureau of Yards and Docks, Washington, D. C.—Fred B. Webster, Shipbuilding Cyclopedic, Woolworth Building, New York.—Maj. R. H. Brown, 21 East 127th Street, New York.—M. C. Brush, 1305 Medical Arts Building, 16th and Walnut Streets, Philadelphia, Pa.—Maj. Ralph Plumb, Buffalo Bolt Co., Buffalo, New York.

1902

FREDERICK H. HUNTER, Secretary, Box 11, West Roxbury Station, Boston, Mass.

BURTON G. PHILBRICK, Assistant Secretary, 585 Boylston Street, Boston, Mass.

On Saturday afternoon, June 21, an excursion of the class was held to the Ward-hurst Club at Lynnfield, Mass. The trip was made by motor with Walker, Upham, E. E. Nelson and Charlie Mixter providing the cars. At the Club, Collier was awaiting us, having run over from Beverly to join the crowd.

After the fatigues of the journey had been suitably assuaged a game of baseball was staged with the following lineup: The Drymartinis—Edwards, catcher; Walker, captain and pitcher; Hamblet, first base; Moore, second; Collier, third; Nelson, left field and a lad named Billy as shortstop. As the team made many shifts in their desperate attempts to stop the triumph of their foes the list given merely crystalizes the facts at one stage of the contest. The other team, the Ryehighballs, was captained

by Mixer, who caught, with Upham as pitcher; Boardman, first base; Philbrick, second; Nickerson, third; Dana Fisher (while he lasted) shortstop; and Hunter as left field. After six innings, with the Ryehighs leading twenty-two to thirteen, a recess was taken for refreshments; when play was resumed Billy had faded and as Dana F. had wilted after making three runs the alleged "nines" essayed only sixty-six and two thirds per cent. With the score thirty-two to twenty-seven at the end of the ninth inning, the Drymarts used the pencil vigorously and claimed a tie, but justice triumphed as the Ryehighs tightened up in the tenth and held the D-Ms to four runs and made five themselves with only one out.

The weary players repaired to the clubhouse, where a lobster dinner was served, and the sunset and other departing forms of illumination were observed with interest and pleasure. During the dinner a brief class meeting was held, resulting in the election of the following officers: President, Nickerson; vice-president, for Boston District, Walker; for New York District, Mathesius; for the Chicago District, Lockett and as assistant secretary, B. G. Philbrick. (The secretary was a hold-over.) Music and dancing filled in the time and the party broke up after raising the echoes with a class yell and a "We are happy."

Our military men are gradually being demobilized; Major Comins is back at St. Francois, Mo., and very modest as to how he won the D. S. O.—Major Seabury expected when last heard from to be back in Providence by July 1, where his address will be 63 Albert Avenue; we hear that he is to enter the contracting field.—Major Borden is recently mustered out and is making his headquarters in Fall River, where his address is 106 Highland Avenue.—Lieutenant-Colonel Wadleigh of the Marine Corps is now posted at Annapolis, Md.—Phil Worcester, our other classmate in the regular service, has been advanced to be a major of field artillery, but as yet we have had no details of the service of our two military men.—Frank Hill Smith is a lieutenant in the Coast Artillery Corps, A. E. F.—Major Harold Blanchard is back in Boston, his address being 925 Boylston Street.—Major Kenneth Grant is stationed at Langley Field, Va.—Captain Lockett is out of the service and is vice-president and general manager of the Lawson Manufacturing Co., 228 West Superior Street, Chicago.—We understand that Howard C. Judson, long carried on our files as "address unknown," is a major in the Marine Corps.—Captain Proctor is back with the Vermont Marble Co. at Proctor, Vt.—Major Paul Weeks is in the Tank, Tractor and Trailer Division of the Ordnance Department, Washington.

Les Millar has been for some months in Detroit, with the Hotel Tuller as headquarters, but we understand that this location is only temporary.—Hamblet is with the Avery Chemical Co., Lowell, Mass.—Robbie continues to shine in the columns of the Vocational Summary, and it is a poor issue of this publication, to our thinking, that has not at least one uplifting article from his pen.—Bassett has been chosen secretary of the newly formed Worcester Section of the Appalachian Mountain Club of Boston.—Matthies is in the New York office of the Western Electric Co., working on the automatic telephone proposition.—Ralph Franklin is now president of A. B. Franklin, Inc., Heating Engineers, 25 Haverhill Street, Boston.—Walker has moved his offices to 85 Devonshire Street, Boston.

A class dinner was held in New York at the Technology Club on April 25, with A. E. Hansen, Grant Taylor, Joe Philbrick, Dunc Franklin, Robbie, Reed, Hathaway, Montgomery, Ned Baker, Hammond and Mathesius, present. The dinner and reminiscences following proved so interesting that the meeting did not adjourn as planned, to attend a smoke talk being held by the Tech Club. Plans were laid to make the class gatherings in New York of a regular monthly character next winter.

1903

MYRON H. CLARK, 1790 Broadway, New York, N. Y.

RALPH H. NUTTER, Assistant Secretary, Box 274, Lynn, Mass.

Your secretary on his recent trip abroad had the pleasure of attending a happy Technology reunion and dinner party at Francois Procope's in Paris on April 5, 1919. Among those present that '03 men know were, Col. (Dr.) James Norris, Col. Dugald C. Jackson, and Harold H. Gould, '04.

Eighty wounded men are to be assigned by the Federal Board for Vocational Education for training in electricity and auto mechanics' work at the Franklin Union under the direction of John W. Calnan, '03.

CHANGES IN ADDRESS

Maj. Charles S. Cole, United States Cartridge Company, Lowell, Mass.—Capt. John L. Jones, Fairbanks Morse Company, Hudson Terminal, New York, N. Y.—Thomas M. Hamilton, Lewiston, Montana.—Albert A. Haskell, E. B. Badger & Sons Company, 75 Pitts Street, Boston, Mass.—Frank D. Hayden, 1906 East 65th Street, Seattle, Wash.—Mrs. William A. Hutcheson, 45 East 82d Street, New York, N. Y.—Lieut.-Col. Frank B. Jewett, Western Electric Company, 463 West Street, New York, N. Y.—Henry A. Pemberton, 732 Monadnock Building, Chicago, Ill.—Caspar A. Schmidt, Box 1860, Denver, Col.—Professor Richard C. Tolman, Cosmos Club, Washington, D. C.—Lewis Wehner, 726 Marshall St., Milwaukee, Wis.—Capt. William Winter, 1306 Fletcher Trust Building, Indianapolis, Ind.

1904

HENRY W. STEVENS, Secretary, 39 Boylston Street, Boston, Mass.

AMASA M. HOLCOMBE, Assistant Secretary
610 Boatmen's Bank Building, St. Louis, Mo.

THE FIFTEEN-YEAR REUNION

The fifteenth anniversary of the graduation of the great and glorious class of 1904 has been celebrated, and the celebration was some success. The gathering was held at "The Grand," Mount Vernon, N. H., June 20, 21 and 22, and twenty-six classmates were present. The Grand is located on the top of a hill one thousand feet above sea-level and commands a wonderful view of all the surrounding country. It is equipped with tennis courts, bowling alleys, swimming pool, croquet grounds, clock golf, miniature nine hole golf course, while a full size nine hole golf course lies close by. It constituted an ideal place to hold the reunion and all who attended were enthusiastic over the place and the treatment received while there. It is needless to say that all the above mentioned methods of amusement were thoroughly tried out. The "eats" were fine and not a single word of complaint was heard during the outing.

The following chronicle of the reunion is perhaps somewhat sketchy, and the author specifically disclaims all liability for all misstatements, falsehoods, lies, omissions, errors, additions, or deviations from any other person's remembrance of events, and grants permission to any one, dissatisfied with this record, to write one for themselves.

The start was made from the Engineers' Club, where the "gang" gathered and accepted the hospitality of Mert Emerson for lunch. Eighteen men made up the party and about one-thirty o'clock began to get under way for Mount Vernon, after about an hour spent in shaking hands and meeting old acquaintances. Comstock was in a deep quandary as to how to insure the absolutely safe arrival at Mount Vernon of certain class supplies. He finally solved the problem, after a spirited discussion, by splitting his load and forwarding a portion in his brother's car as far as Nashua, concealed beneath his young nephew.

On counting noses and automobiles it was found that we had more cars than passengers, which goes to show that the class is going some in financial matters. In order that no one should drive up without a passenger, Emerson, Jack Draper and Stebbins left their cars behind.

The following list shows how the cars were loaded and also gives a roster of those who were at the Engineers' Club: "General" Holcombe in full uniform rode off in Charles Haynes' Mitchell followed by Dick Hartshorne with Haley and "Gene" Russell as passengers in his Dodge.

Kalmus drove away with Emerson and O'Connor in a Franklin sedan. Harry Kendall loaded George Sanborn, Jack Draper, Evans and F. M. Chace into his Cadillac 8 and decided to follow Steve and Stebbins in the former's red-wheeled Kissel. Dave Sutton, with Roberts as passenger, completed the procession with his Paige.

Comstock decided he would leave Boston about five o'clock and would call at the Club for any stragglers.

The trip was made via Lowell, Nashua and Milford, without any incidents other than a couple of showers, without which no '04 outing can be considered complete. From Milford to Mount Vernon, stiff grades were encountered, but all the cars had arrived at the Grand by five-thirty.

The first thing done by each arrival was to take a look at the view and register a few remarks on the beauty of it and the wonderful location of the hotel. The next thing was to beat it into the hotel in the hopes of getting the best room in the place. All the rooms were good, but some were better. Some of the crowd got baths and some didn't have any all the time they were there. The crowd soon were ready for sport, and "General" Holcombe, accompanied by his chauffeur, Charlie Haynes, George Sanborn and Sutton rushed off to the golf course, where they got in some preliminary practice. The opening matches in the tennis tournament were also held before supper. Kalmus, single-handed and alone, defeated the best efforts of Mert Emerson and Stebbins, so handily that Kendall was added to the opposition. Kalmus again won by a score of six to nothing or less, although the author is firmly convinced that the trio got at least one point.

The next event was supper and everybody was in perfect trim. The waitresses were kept busy and finally reported nothing left in the kitchen, which brought the meal to a close.

After supper, we adjourned to the lawn, where clock golf, croquet, and miniature golf were indulged in. When the clock finally ran down at dark, Sanborn was adjudged the champion, having a score of something over twelve. "General" Holcombe towered far above all other contenders at croquet, and became champion without any effective opposition.

Dave Sutton won the miniature golf championship, having a score of twenty-six and seven-eighths for the nine holes. Steve was "runner up" at this, having "run up" his score to about one hundred ninety-two. About dusk Ed Parker arrived in chains, or rather in one chain, having made a cross-country flight from Portland

in his Reo. He got stuck in the mud, due to believing implicitly in rural directions as to roads, and left one chain to mark the spot for the guidance of other autoists.

When it became too dark for further outdoor sports, we adjourned to the hotel where various card games were played, such as "Rummy" and bridge. O'Connor was the champion "Rumm" and Holcombe and his partner must have been doing well at bridge, for they couldn't be induced to quit until eleven-thirty. Haley, exhausted from watching the tennis games before supper, retired at nine o'clock. By eleven forty-five all had retired to their rooms, but if one listened at the various doors, the impression might have been gained that the reunion was being held by some young ladies' seminary from the amount of gossip going on.

SATURDAY, JUNE 21

Saturday morning dawned "brite and fare" and the first event was the arrival of Cy Ferris, piloting his Buick with "Tommy" Rockwood and Phil Sweetser as passengers. They had left Newton at five a.m. and arrived before most of the gang were out of bed, and were ready for breakfast. Supplies must have reached the hotel during the night, for there was no food shortage.

After breakfast, the whole bunch adjourned to the ball field. Sanborn and Holcombe were appointed captains and soon an honest-to-goodness ball game was in progress, which would have turned Ban Johnson green with envy, could he have seen it. The game was replete with sensational fielding plays, daring base running, tremendous strike-outs, weak hits, heavy hits, arguments, and every other thing that makes a ball game enjoyable. There was one serious fight between Charlie Haynes and Steve in which the latter bit his pipe stem into two pieces. "Gene" Russell playing third base made an unassisted triple play, by catching a fly ball with the bases full, stepping on third base for the second out, and tagging the short-stop of his own side for the third out. The pitching of General Holcombe and Emerson was truly remarkable, the former for its speed, and the latter for its slowness. Steve replaced Emerson in the last inning and, though batted freely, aided by remarkable support from the remainder of the team, retired twelve batters without a run being scored. Bill Evans, in chasing a fly ball, stepped in a hole and nearly ruined one of his ankles, this being the only casualty. The score of the game remains in doubt, the victory being claimed by both teams. During the game Bill Anthony and Buck Langley arrived from Boston and were made welcome.

Immediately after the ball game, the finals in the tennis doubles were played. Kalmus was assisted in losing this match by Steve, the winners being Emerson and Haynes, the score being two down (Kalmus and Steve). Then Kalmus and Haynes played in the semi-finals of the singles, Kalmus winning, the score being nip and tuck or six to five.

About this time Dan Comstock arrived in his eleven cylinder Packard roadster, having been on the road (presumably) since five p.m., Friday. His supplies were intact and he was received with open arms. He announced that he would be obliged to return to Nashua later to receive the second consignment of supplies.

During the remainder of the forenoon there were sporadic outbreaks of tennis, croquet and golf on the small course. Stebbins played a set of tennis with Langley and was defeated six to two. Soon after he was seen playing with one of the young lady guests of the hotel (aged about seven). The result of this match is not known. Todd arrived alone in his big Paige about noon, at which time aquatic sports were being held in the swimming pool by Stebbins, Roberts, Parker and Holcombe, assisted by one green bull-frog and a Florida alligator. Roberts got ferocious and bit the

alligator, wounding it severely. Stebbins, in shooting the chutes, tried to break off the end of the chute with his heel, but only succeeded in getting a black and blue spot.

After this, Glee Club practice was held under the direction of Buck Langley, with Kalmus presiding over the piano. In this work Charlie Haynes' silver tenor and Jack Draper's reverberating bass were very much appreciated in the rendition of the Stein Song. Following the singing came the call to lunch which was vanquished with the usual ease and celerity. Joe Haraden arrived just in time to miss having lunch with us, but was ready for the rest of the big doings.

The afternoon was taken up with the qualifying round of the golf tournament on the big links. On arriving at the Clubhouse, all the players were making satisfactory financial arrangements at a dollar per head, with the fair young damsel in charge, when the young lady's father arrived on the scene, announced that the charge for an afternoon's golf was fifty cents and proceeded to distribute rebates.

The golf course was some course. The fairway was somewhat worse than fair most of the way. Fields of waving grain swallowed up any ball which deviated from the straight and narrow path. The greens were full of pitfalls and places where grass grew once. The marking flags were in fine shape, as were also the sand boxes and the water pails. The course was also finely equipped with wild strawberries, which were greatly enjoyed by certain players, while the caddies and the other players hunted for the balls driven by the fruit-fanciers.

The following players were declared as qualifying: Hartshorne, Haynes, Sutton, Emerson, Sanborn, Parker, Rockwood, Ferris, Russell and Haraden. As each of those mentioned owned a bag of clubs, it was felt that they must be qualified to play golf. Nearly everybody in the crowd participated, but any one not owning clubs could not expect to compete on even terms with the regular players. It was intended to hold the final round on Sunday morning, but somebody forgot it, and the championship was awarded to Dick Hartshorne on the strength of a score of forty-seven. Charlie Haynes was a close second with forty-eight. "Gene" Russell gets honorary mention for finding the most balls for other people. Chace earned the reputation of the best one-club player, playing the entire course using a single iron club. Chace said he wanted to get acquainted thoroughly with one club before trying any other.

During the interim before dinner, various small gatherings were held in different rooms, where different subjects were discussed in a spirited manner. Some of the boys were able to down anything suggested, no matter how complicated.

Dinner Saturday evening included the only business session of the outing. Everybody was present and this seems to be a good place to give the roster, which was as follows: M. L. Emerson, Hartshorne, Haraden, Todd, Haley, Jack Draper, Evans, Kendall, F. M. Chace, Anthony, Langley, Sutton, Holcombe, G. W. Sanborn, Rockwood, Comstock, Stebbins, Ferris, Roberts, P. S. Sweetser, E. H. Russell, A. W. O'Connor, Parker, Haynes, Kalmus and Stevens.

After the inner man was satisfied, the secretary read letters and telegrams of regret from many classmates. Bill Eager, Hiller, Gus Munster, Homer and "Volts" Ovington all sent messages that sudden emergencies arose at the last minute which prevented their attendance. Ovington is at Atlantic City, with the Curtiss Flying Station. He is flying again and said that if the reunion had been held at Atlantic City, he would have taken us all up. Interesting letters were read from Hayden and Lang. Plans for future class activities in connection with Institute affairs were outlined by Mert Emerson, who has recently been elected a member of the Corporation of the 'Stute. More will be heard about this later. It was the opinion of those present, that we are coming to the time in our lives when we should keep in closer

contact with one another. It was the sense of the meeting that these outings should be an annual affair and it was so voted. Kalmus then extended an invitation to the class to spend the reunion for next year as his guests at Wianuo, Cape Cod. His invitation was unanimously and vociferously accepted and a heartfelt vote of thanks given him for his generosity.

Following the dinner a bowling match was held between two teams known as "A" and "B." The writer does not know which was "A" and which was "B," but the members and scores are given below.

Holcombe	59	Rockwood	69
Sanborn	67	Anthony	56
Haynes	63	Draper	62
Langley	80	Haraden	55
Ferris	85	Roberts	71
Evans	59	Emerson	62
	<hr/> 413		<hr/> 375

By the score, it will be seen that General Holcombe led his mates to victory, but Charlie Haynes confessed later that the pins on both alleys were mixed Boston pins and candle pins. By careful and unobtrusive methods, he succeeded in transferring all the Boston pins to the alley on which his team was bowling, while all the candle pins found their way to the other alley. There is no doubt that these Hunnish tactics had something to do with the result of the match.

After the bowling, the boys gradually drifted up to Comstock's room to an executive and musical session. Dan is sure some mixer, and before the session was over the supplies were considerably diminished. Reminiscences of 'Stute days were related, yarns were spun, and songs were sung by the Glee Club under Langley's leadership. A new class song, known as "The Tiger Song," was adopted, and will be used at all future reunions. About midnight the session broke up, amid expressions of regret that the next day would end the fifteen-year reunion.

SUNDAY, JUNE 22

Sunday was another beautiful morning, but nobody seemed very enthusiastic about early rising. There were numerous creakings heard as joints were carefully bent and tested. Ed Parker left for Portland before any one else had waked up. Comstock was the last man down to breakfast, being delayed by taking account of stock of the supplies.

After breakfast, the real championship ball game was played between the Kals and the Coms. The game Saturday was mere child's play, compared to this game. Stringent rules were made, precluding batting with both hands on the bat, base runners advancing on anything but batted balls, etc. Bill Anthony kept the score on a shingle. A glance at the score will show that both teams were slow starters, but whirlwinds at the finish. Comstock met his Waterloo in the fourth inning, his offerings being hammered to all portions of the world. Emerson relieved him in the fifth inning and was only five-eighths as bad as the score shows. Charlie Haynes was easily the star player, digging up grounders and throwing to first like a big leaguer. Holcombe ran bases like Ty Cobb, his fierce expression coupled with his moustache scaring the infielders out of his path. Phil Sweetser played a whale of a game, recovering his eyeglasses time after time, without a fracture. All the outfielders lost pounds of weight as they ran miles and miles through the hayfields and underbrush in pursuit of long hits. Kendall and Draper, the catchers, were probably the

bravest men of all, for they faced the terrific speed of the pitchers without gloves, masks or body protectors. All players not specifically mentioned above are hereby assured that their playing was truly remarkable, and that without them the teams would have been unable to achieve any success whatever.

The score and line up:

KALS.		COMS.	
Kalmus, Capt., 1 b.		Comstock, Capt., p.	
Haynes, s. s.		Emerson, assist., s. s.	
Langley, l. f.		Stevens, 2 b.	
Holcombe, p.		Draper, c.	
Stebbins, 2 b.		Haraden, 3 b.	
Ferris, r. f.		Sanborn, c. f.	
O'Connor, c. f.		Sutton, 1 b.	
Russell, 3 b.		Sweetser, s. s.	
Kendall, c.		Roberts, l. f.	
		Hartshorne, r. f.	

	1	2	3	4	5	
KALS.	1	0	0	8	5	14
COMS.	1	0	4	4	4	13

After the ball game, Langley defeated Comstock in the semi-finals of the tennis singles, after a hot contest, the score being thirteen to twelve. This brought Kalmus and Langley together in the finals. That was a contest worth going miles to see, the men being so evenly matched that after several hours play the score was even at thirty-seven to thirty-seven and it was decided that each man was entitled to one-half of the singles championship. It is hard to say which was the more finished player, as they were both carried off the court on stretchers.

Just before dinner Stebbins' family arrived in his car to take him back to Boston. He had such a wild ride up with Steve, that he 'phoned to Mrs. Stebbins to come up and rescue him from such a trip back.

These events had occupied the time until dinner, which was enjoyed as had been all previous meals. Soon after dinner the cars began to slide down the hill, each bearing a load of satisfied passengers, all of whom registered a vow not to let another reunion go by without their attendance. Everybody had one fine time from start to finish, and was sorry when it was over.

We had fine weather, a wonderful place to hold the reunion, and a mighty congenial crowd of fellows present, all of which combined made the fifteen-year celebration a grand success.

1905

GROSVENOR D'W. MARCY, Secretary, 246 Summer Street, Boston, Mass.

CHARLES W. HAWKES, Assistant Secretary, 25 Saxon Road, Newton Highlands, Mass.

F. F. Longley, now colonel, U. S. A., whose important work in connection with the water supply of the American Expeditionary Forces has been previously mentioned in the REVIEW, is now ranking officer in charge of a detail of two thousand men selected from seven thousand applicants to follow courses of study in English universities and educational centers before returning to America for discharge from the army. Many of these men are graduates, and none have had less than the equivalent of two years' college training in this country. The news item containing this information continues:

The students will be distributed according to their requirements, which range from engineering to theology, among twenty-two universities and colleges and about thirty other institutions, including the new fellowship of medicine which Sir William Osler has started in London for advanced research work in medicine. Special courses are to be established for them in many cases.

H. R. Robbins, captain, U. S. A., wrote from Peking on April 27:

As a bit of a contribution for the Tech '05 news, I might remark that I am leaving Peking tomorrow on the first stage of my return to Washington to receive my discharge from the military service, and should arrive there about the last of June.

I arrived in Peking to take up my duties as assistant to the Military Attache on October 24, 1918, and have been fortunate enough to see a good deal of the country since then: as far south as Hankow, on the Yangtse, as far west as the end of the Lung-Hai Railway at Kwanyintang in Western Honan, and as far north as Harbin and Vladivostok. I also had the pleasure of visiting Taiyuanfu the capital of the Province of Shansi, and meeting and talking with General Yen Hsi Shan, the model governor.

My plans for the resumption of my professional work after my discharge from the army are somewhat uncertain, but I may return to the Far East, as I have established good connections here, and like the country, and believe it has good possibilities. I have been devoting my spare time to improving my knowledge of Chinese and Russian, with satisfactory results. Until I decide where I am going to locate my address will be 1508 Elm Street, Manchester, N. H.

John C. Damon, lately major, U. S. A., has returned to civil life and is now with the West Penn Power Company. A more detailed account of John's work appears in this number under "Tech Men in the Public Eye." The secretary ran into him twice in khaki, once in Boston, where he was investigating threatened power shortages in connection with war contracts, and again in Washington where he was investigating the possibilities of finding a place to eat, which was about as difficult at that time.

Grafton B. Perkins, major, U. S. A., recently made a flying trip to Boston and Salem, on two days' leave before starting on a three months' trip to Siberia, where he will visit the various posts and stations of our forces in that country.

Rev. Sydney A. Caine will be in Boston for the summer, where he will be attached to the clergy staff of the Church of the Advent during the absence of Dr. van Allen abroad.

Roswell Davis is winding up his work at Princeton and with the aviation schools and in July moves to Beverly, Mass., to head a department on motorization with the United Shoe Machinery Company.

Roy Allen, lately captain, U. S. A., is now associated with Bill Spalding, who at last accounts was research engineer with the National Aniline and Chemical Company, at Buffalo. Roy's address is Church Street, East Aurora, N. Y.

Other changes of address are: Thomas P. Bedford, Fayette, Mo.—Robert Bixby, North Andover Depot, Mass.—Harry P. Charlesworth, 195 Broadway, New York City.—Lewis J. Lyman, 15 Ashburton Place, Boston, Mass.—Theodore P. Moorehead, Room 808, 30 North Michigan Avenue, Chicago, Ill.—George Wald, P. O. Box 1085, Phoenix, Ariz.

Suggestions are in order as to how we should celebrate our fifteenth anniversary. It is possible that there will be an All-Technology Reunion next year, but in any event it would seem that '05 ought to have doings of some kind.

There seems to have been a falling off in vital statistics lately. Whether this like everything else is attributable to the war or some other cause is not known to the secretary. He will, however, come forward with one item of his own, namely the birth of Oliver Murdock Marcy, on April 30, 1919.

1906

C. F. W. WETTERER, Secretary, 147 Milk Street, Boston, Mass.

J. W. KIDDER, Assistant Secretary, 50 Oliver Street, Boston, Mass.

The assistant secretary requests all members of the class to note the change in the address of the class secretary. Wetterer is back in the Boston office of the Stone & Webster Management Association after having spent about two years as manager of the Tampa (Fla.) Electric Company. The assistant secretary perhaps has particular reasons for rejoicing over Wetterer's return, but the whole class will be glad to learn that the secretary is again on the job.

In the April REVIEW mention was made of the form submitted to all members of the class for the purpose of obtaining war service records, both civilian and military. When these records were requested it was thought that the class might publish them in book form. It has since been decided that the Alumni Association will issue a War Record Book for the Institute, therefore the project of a 1906 book has been abandoned. The material already received from the members of the class will be of great value in the proposed book.

The Alumni Association intend to send a questionnaire to all former students to obtain data for this volume.

The secretary wishes to take this opportunity to impress upon every '06 man the importance of filling out the questionnaire and returning it promptly.

We know that Tech's war record has been remarkable and '06 has been well represented in the establishment of this record, consequently we want '06 to be well represented in this book; it will be if '06 men do their part in furnishing information, therefore please assist the editors of the book and do something for the glory of 1906 and Massachusetts Institute of Technology by giving the coming questionnaire all the attention it deserves.

In previous issues we have referred to Naval Constructor Ackerson's work with the Emergency Fleet Corporation. 1906 men will be interested to learn that he became director-general of that organization, succeeding Charles Piez who resigned to resume private business. Ackerson was ordered to the Emergency Fleet Corporation on July 27, 1917, in the position as assistant to the general manager. In April, 1918, he was made assistant director-general under Mr. Schwab and in August, 1918, became assistant general manager. In September he became vice-president, which position he held until his last promotion to director-general.

1906 has been further honored by another of the naval constructors included in our membership. In this case it is Lieut.-Com. Lewis H. Maxfield. The following account of Maxfield's exploit is taken from the Boston "Herald":

Washington, July 14—Secretary Daniels has officially commended Lieut.-Com. Lewis H. Maxfield and Lieut. Frederick P. Culbert, two officers of the American Naval Aviation forces in service abroad, for their part in the rescue of American aviators who were caught in the wreck of a French dirigible balloon in which they were operating.

In a letter to Lieut.-Com. Maxfield, commandant of a naval air station, who was making a flight in the dirigible to inspect the airship and its crew, Secretary Daniels wrote:

"The courage and resource displayed by you after the wreck of the dirigible, particularly in the rescue of two of your men, are worthy of the gallant traditions of the service to which you belong."

Secretary Daniels has made recommendation to the secretary of the treasury that a life-saving medal be awarded to Lieutenant-Commander Maxfield.

Lieutenant Culbert was highly commended for the courage and initiative he



TROIS MOUSQUETAIRES

Major John H. House, '98, George C. Gibbs, '00, and
Captain Carroll Bennink, '99

displayed in aiding in saving the lives of the two men who were in danger of drowning after the dirigible was wrecked.

The dirigible on which the American aviation officers and men were serving was escorting a convoy in the war zone when it got into difficulties. Efforts to right it were unavailing. The dirigible stood on the water, nose downward. As it struck, Chief Gunner's Mate L. E. Allely and Quartermaster H. A. Elliott, who were in the forward part of the balloon car, jumped.

A landward breeze began to carry the dirigible swiftly toward land. The shore was not more than a mile and a half distant. Allely and Elliott, both of whom were encumbered with heavy flying clothes, called for help.

At the risk of his own life Maxfield plunged in to the rescue and with the assistance of Culbert kept the two men afloat until a launch picked them up.

Lieutenant-Commander Maxfield was born in St. Paul in 1883, and was appointed to the naval academy in 1904. He was designated as a naval aviator, October 31, 1917, and has been for some time in service abroad. His wife, Mrs. Harriett Page Maxfield, lives in Norfolk, Va.

The war service records received recently by the secretary contain some very interesting items. Some of them are included below, although most of this information will be reserved for the alumni book.

Harold W. Beers, I, after having performed some important war work in supervising the completion of a \$2,000,000 job at Camp Gordon, awarded to the Southern Ferro Concrete Company, of which Beers was vice-president and general manager, was commissioned a major in the Construction Division of the Quartermaster Department and was sent to Camp McClelland as constructing quartermaster. The work had just gotten under way when the armistice was signed and orders were received to discontinue the project. Beers was discharged from the service, December 13, 1918.

C. R. Burleigh, II, was commissioned a first lieutenant in the Engineers on November 5, 1918. He attended the Engineers Officers' Training School at Camp Humphreys, and on May 1 was commanding officer of Motor Transport Company No. 551 at that camp.

William Couper, I, has performed important service in the Construction Division of the army. Following is an extract from his service record:

First reported at Cantonment Office on Sunday, May 22, 1917. Reported for duty on May 25, 1917, and performed office engineering service in Washington, D. C., until June 6, 1917, when assigned to active duty as commissioned officer. Departed for Columbia, S. C., on June 16, 1917, and served as construction quartermaster in charge of construction at the Sixth National Army Cantonment (afterwards called "Camp Jackson"), S. C. This camp was the fourth in size and as originally built contained one thousand five hundred and nineteen buildings, accommodated forty-four thousand two hundred and fifty men and cost about \$9,000,000.

On January 10, 1918, was transferred to Washington and served as supervising construction quartermaster with jurisdiction over twelve contracts, covering the construction of harbor craft for use at the various army terminals and depots. Two hundred and thirty-four boats were built at a cost of about \$5,200,000. On October 13, 1918, was appointed officer in charge of construction at the North Columbia Cantonment, near Columbia, S. C. Because of the armistice construction was abandoned on this camp, which was to have been artillery training camp for thirty-eight thousand men, on November 30, 1918. At the time of completion the payments and obligation amounted to about \$3,500,000.

When this record was submitted on March 4, 1919, Couper was located in Washington with the rank of lieutenant-colonel serving as officer in charge of the disposal of surplus material and equipment of the Construction Division of the army.

Flويد M. Fuller, II, received a commission as junior lieutenant in the Naval Reserve Force on December 29, 1917. He was assigned to ordnance work and on February 11, 1918, reported to the office of the Naval Inspector of Ordnance, South

Bethlehem, Pa., as assistant inspector of ordnance of the Bethlehem district. On November 2, 1918, he was promoted to lieutenant and on March 13, when submitting his record, expected to be relieved from active duty in the near future.

R. W. Rose, XIII, has received his discharge as lieutenant (J. G.) United States navy, and is now in the automobile business in Boston.

F. R. Batchelder, VI, is one of the few '06 men to serve with the A. E. F. "Batch" was a member of the 401st Telegraph Battalion which spent fourteen months in France constructing the telephone system established there by the American army. The battalion returned to this country on May 24 and has since been discharged at Camp Devens. After a vacation Batchelder will resume his former position in the engineering department of the New England Telephone and Telegraph Company.

The marriage is announced of Arthur P. Watt, III, and Ethel May Morse on Wednesday, April 2, at Brooklyn, N. Y. Watt is a consulting metallurgist with the Missouri Metals Corporation at Mine La Motte, Mo.

News has been received that H. H. Cook, II, passed away at his home in Indian Orchard, Mass., on December 15, 1918.—Word was received May 20, 1919, from the postmaster at Brockton that James Hayes, Jr., had died.

1907

BRYANT NICHOLS, Secretary, 2 Rowe Street, Auburndale, Mass.

HAROLD S. WONSON, Assistant Secretary

Care of W. H. McElwain Co., Manchester, N. H.

Please note the changed address of the secretary; on June 16 he moved from Chelsea, having bought a home at the location given.

Charlie Coffin of Tech Show fame is to be found at 250 West 54th Street, New York City.—Ralph F. Knight, who is with the United Shoe Machinery Co., at Beverly, Mass., has an address of 21 Atlantic Avenue, Beverly, Mass.

Milton MacGregor became the father of Elizabeth MacGregor on February 27, 1919. This is his third child.

Lieut. Henry C. McRae, 207 Singer Avenue, Station E, Arlington, Md.—Alexander Macomber returned from overseas duty early in June, and has taken up his former work with Charles H. Tenney & Co., Managers and Engineers, 201 Devonshire Street, Boston, Mass. Mac looks finely and still wears his "French count" whiskers.

Ernest Miner wrote on June 2, 1919, giving his address as United States Housing Corporation, Dormitory J, Quincy, Mass.—Kenneth Moller is now in Boston, manager for Lockwood, Greene & Co., Engineers, 60 Federal Street, Boston, Mass.—Fred W. Morrill, 5859 Kennedy Avenue, Cincinnati, Ohio.

Capt. W. Watters Pagon, consulting engineer, Member American Society Civil Engineers announces that he has reopened his office at the new address, Lexington Building, Baltimore, where he will continue his previous practice as consulting engineer for bridges, buildings and other engineering work.

During the period of the war, Captain Pagon was assigned to the Construction Division of the army on the construction of Camp Meade, Maryland, and the Curtis Bay Ordnance Depot, South Baltimore, Md., as first assistant to the constructing quartermaster. Total expenditure nearly twenty million dollars.

Captain Pagon is a specialist in bridge and building work. He will have associated with him specialists in water, sewer and electrical design and power development. Reports, and financing of new projects.

On May 23, 1919, a letter was written from Tours, France, by Maj. Hugh Pastoriza, Ordnance Department, U. S. A. He says:

As you see, I got over. I've been busy on engineering work in connection with design of the big railroad guns ever since I got in the army. Just now they have me working with the French trying to absorb some of the results of their experience with artillery so that we can get the benefit of it. I hope to get back to the States in a couple of months more.

Donald G. Robbins is with the Triplex Safety Glass Corporation, Mt. Vernon, N. Y.

On May 28, 1919, a son, Lyman Newell Robinson, was born to Mr. and Mrs. Winslow D. Robinson, of 10 Hyde Street, Newton Highlands, Mass.—A. F. Stevenson is now at 124 White Street, New York City.

During May a letter was received from H. E. Tresnon, from Owen House, Lancaster, England. Part of his letter follows:

In June, 1914, I got married in England and returned to the States in July, and was intending to travel to the West, but decided when the war started that an Englishman ought not to travel westward when England was at war. I worked on shells with the General Electric at Lynn until the time that England started in the munition work in earnest, when I crossed to England, November, 1915. I worked on shells entirely from then till just before the end of the war when my health gave out. The next you hear from me may be from somewhere in the States. I was pleased to read that Crosby had five children and a new address. My total possessions are one wife and one pair of twins. The twins, a boy and a girl, were born in Boston, in September, 1915.

Tresnon sends a photograph of the twins, his wife and himself, and they make a fine looking quartette.

Raymond F. Conron, of Danville, Ill., died of pneumonia on January 23, 1919. There are no further details, as yet.

From the "Railway Age" of May 23, 1919, is printed the following interesting item about Robert E. Thayer:

The Simmons-Boardman Publishing Company, publisher of the "Railway Age," has opened a new office at No. 85 Fleet Street, London, England. It has been placed in charge of Robert E. Thayer, who becomes European editor of all the publications of this company, including the "Railway Age," the "Railway Mechanical Engineer," the "Railway Maintenance Engineer," the "Railway Electrical Engineer" and the "Railway Signal Engineer."

Mr. Thayer, until his recent transfer to London, was located in our New York office and was mechanical department editor of the "Railway Age" and managing editor of the "Railway Mechanical Engineer."

Mr. Thayer has a technical education, a railroad training and a ripe journalistic experience. We have located him in London because it is the best point in Europe from which to gather information regarding foreign railways. But London will be merely his headquarters, and he will travel extensively in Europe in quest of the kind of material which will be of interest and value to our readers and patrons.

For some time Mr. Thayer was employed by the American Locomotive Company as special apprentice and in the calculating department at Schenectady. He then entered the service of the Boston & Maine in the test department and was later instructor in mechanical engineering at the Massachusetts Institute of Technology. He became connected with the "Railway Age" editorial staff in January, 1911.

1908

RUDOLPH B. WEILER, Secretary, care of The Sharples Separator Co., West Chester, Pa.

LE SEUR T. COLLINS, Assistant Secretary, care of Imbrie & Co.,
13 Congress Street, Boston, Mass.

It is again our sad duty to report the death of another of our members, that of Russell Gilbert Crane on March 26, at New York, of pneumonia. After graduation he entered the employ of Parker, Thomas & Rice, Architects, of Boston, where he remained for about two years, then going to the office of Cass Gilbert of New York, where he was employed up to the time of his death. Mr. Gilbert has forwarded us a letter of appreciation of his services and character which shows that our late classmate had made a place for himself in the hearts of his co-workers, as it bears the signatures of twenty-four of his associates. Space prohibits the publication of the letter in full.

The post-office department has returned mail addressed to John Joseph Mullen, at Wellesley, Mass., marked "deceased," but we have no further information at this time. He was a member of the class in his sophomore year. Do not confuse this member with John Joseph Mullen of Denver, Colo.

The next issue will contain the complete list of the men who have been in the service. We make the following additions to the last publication:

Robert D. Hennen, first lieutenant engineers, commanding officer, Company E, 22d Regiment, until January 18, 1919, when discharged.

First Lieut. John E. Johnson, engineers, was still in France in April with Construction and Maintenance Forces.

A. R. Merritt was still in France in April.

George D. Whittle, first lieutenant Engineer Corps, 7th Engineers' Officers, discharged December 10, 1918.

Dwight Dickinson has been awarded the Distinguished Service Cross, and Croix de Guerre, as will be seen by reference to the last issue. Dickinson was lieutenant Medical Corps, U. S. N. R. F., and surgeon of the 5th United States Marines, A. E. F.

Capt. Hobert W. French has returned from overseas where he had been advanced from first lieutenant of engineers to captain and assigned to the office of the chief of staff.

NEW ADDRESSES

H. W. Calder, The Poole Engineering and Machine Co., 50 Church Street, New York.—Arthur E. Bremer, 220 Broadway, New York.—Wilfred A. Morris, 14 Emerson Avenue, Crafton Branch, Pittsburgh, Pa.—Matthew Porosky, 125 Amory Street, Brighton, Mass.—S. Lock Davidson, Room 2, Beacon Building, Wichita, Kan.—John H. Locke, care of Commonwealth Steel Co., Granite City, Ill.—G. William Bailey, 552 W. 23d Street, New York.—Walter E. Caldwell, care of Walter E. Caldwell Co., Louisville, Ky.—W. Armour Johnston, Jr., Prince Bay, Staten Island, N. Y.—Myron M. Davis, 210 Water Street, Augusta, M.—Harold S. Osborne, 195 Broadway, New York.—William D. Milne, 141 Milk Street, Boston, Mass.—Clarence W. Clark, 7 Charlton Street, Everett, Mass.—Howard E. Batsford, The Solvay Process Co., Syracuse, New York.—Donald Bowman, Room 620, 72 West Adams Street, Chicago, Ill.—Stiles F. Kedy, Columbia Mills, Inc., 225 Fifth Avenue, New York.—Ernest Whitten, 40 Central Avenue, Lynn, Mass.—Carl H. Bangs, 8 May Avenue, Braintree, Mass.—F. W. Willey, 3415 Mooney Avenue,

Hyde Park, Cincinnati, Ohio.—R. E. Manning, North Billerica, Mass.—A. L. S. Ferrandi, 14 Milton Avenue, Dorchester, Mass.—Edward A. Plummer, care of American Telephone and Telegraph Co., 195 Broadway, New York.—Franklin T. Towle, 74 Clement Avenue, West Roxbury, Mass.—Richard C. Collins, care of Alexander F. Crichton, Wilmington Mills, Wilmington, Del.—Willis H. Mason, 42 Broadway, New York City.—J. B. Stewart, Jr., 1226 Bryson Street, Youngstown, Ohio.—Alfred B. Babcock, 1301 Carroll Street, Brooklyn, N. Y.—James M. Talbot, care of A. S. White Dental Manufacturing Co., Prince Bay, New York.—Arnold W. Heath, 93 Boylston Street, Watertown, Mass.—Langdon Coffin, 88 Broad Street, Boston, Mass.—Lincoln Mayo, 1561 Beacon Street, Brookline, Mass.—W. B. Hunter, 37 Allston Place, Fitchburg, Mass.—Harry P. Sweeny, Fort Montgomery, New York.—Frederick A. Cole, 12 Pemberton Square, Boston, Mass.—Monroe Ames, 38 Pearl Street, Medford, Mass.—Matthew Cowden Hayes, 45 Manchester Place, Buffalo, N. Y.—Arthur O. Christensen, 99 Meserole Avenue, Brooklyn, N. Y.—Gregory M. Dexter, care of Honolulu Iron Works Co., Woolworth Building, New York City.—Ira G. Hersey, Jr., 78 Beach Street, Wollaston, Mass.—Orrin S. Lyon, care of William E. Hooke, 459 East 25th Street, Brooklyn, N. Y.—W. C. Folsom, 2809 Erie Avenue, Cincinnati, Ohio.—Harold W. Griswold, 210 Farmington Avenue, Hartford, Conn.—George T. Glover, 1318 Lakewood Avenue, Lima, Ohio.—John H. Caton, 3d, 330 Norwood Avenue, Edgewood, R. I.

1909

CHARLES R. MAIN, Secretary, 201 Devonshire Street, Boston, Mass.

GEORGE A. HAYNES, Assistant Secretary, 530 Atlantic Avenue, Boston, Mass.

TENTH-YEAR REUNION

The anniversary reunion was a distinct success, thanks to the fine support the class gave the committee upon whom the preliminary arrangements fell. Thirty-five members of the class went to Powder Point Hall at Duxbury, Mass., for the week end of June 20-23, and the class spirit was not confined to the men alone. For the first time, the class was honored by the attendance of one of the co-eds. Miss Luscomb came down for Sunday, and was duly initiated, much to the amusement of the boys.

It was altogether a very representative crowd, some coming from New York, one from Washington, one from Detroit, one from Pittsburgh, one from St. Louis, and one from as far west as Oklahoma. "Stew" Pearce's wife and little daughter also came down for Sunday.

Friday evening "Art" Morrill, who had spent about three years in China, where he was teaching civil engineering in the Pei Yans University at Tientsin, entertained the crowd by telling first in English and then in Chinese, a Chinese story teller's version of Jonah and the whale, and George Washington and the cherry tree. At least he said it was Chinese and the rest of us couldn't disprove it.

Saturday morning was spent playing golf, tennis, baseball, swimming, etc., and in the afternoon a couple of motor boats took us over to the beach near the Gurnet lights, where a real outdoor clambake was served. Some of the fellows went in swimming, but couldn't agree whether the water was fifty degrees or fifty-five degrees.

The tennis tournament of doubles in which all members participated was finally won by Gram and Davis, with Nickerson and Reeds as runners up.

Some of the party returned to Boston Sunday afternoon, the remainder going up over the road Monday morning.

The weather was ideal for the entire time, the hotel was good and the general opinion was that those who couldn't come missed one of the best outings, if not the best, the class has ever had. But no outing can be a success without the co-operation of all, and the committee desires to thank all those who assisted either with their cars or otherwise, to add to the pleasure of the occasion.

Those who attended were: Adams, Ballard, Belcher, Clifford, Davis, Dawes, Dewey, Dickerman, Faulkner, Finnie, Fisher, Gram, Haynes, Ingles, W. H. Jones, Miss Luscomb, Main, Marshall, Martin, May, Maynard, Morrill, Moses, Nickerson, Parker, Pearse, Pope, Reeds, L. C. Shaw, R. L. Smith, Spencer, Temple, Thornley, Wallis, Winchester.

"Mollie" (M. R.) Scharff was married on April 13 to Miss Jeanne Adler of Birmingham, Ala.

Ballard Burgher was married to Miss Grace Dexter of Dallas, Texas, on May 14.

"Carl" Jacobs and Miss Elise T. Darby of Germantown, Pa., were married on the seventh of June.

The engagement of Horace L. Clark to Miss Florence Baker has been recently announced. Clark is now in Chile.

The secretary has recently received word from D. P. Marvin. He has been transferred from the United States Ship "Denver" to the United States Ship "Tacoma," and has been promoted to the rank of captain, United States Coast Guard, which ranks with a lieutenant-commander in the navy or major in the army. At present the "Tacoma" is at Guantanamo for target practice.

Under date of April 2, 1919, by direction of the president, the Distinguished Service Medal was awarded to Col. Bradley Dewey.

The citation reads as follows:

Colonel Bradley Dewey, Chemical Warfare Service, for exceptionally meritorious and conspicuous service as chief of the Gas Defense Production Division in achieving under most trying circumstances remarkable results in supplying the American Expeditionary Forces with sufficient number of gas masks of high grade and of improved design.

The United States Artillery Journal has awarded first prize in its 1918 competition to Lieut.-Col. F. M. Green, who is at present in charge of the Coast Artillery section of the Reserve Officers' Training Corps at the Institute. Green's article is entitled, "Railway Artillery for Coast Defense."

It is with regret that the secretary has to announce the death of two more men of the class.

Priv. Raymond H. Fellows, I, was killed in action at Chateau-Thierry, on July 17, 1919. Fellows was a member of Company F, 101st Engineers.

Capt. Stuart Thomson, V, died of pneumonia on March 23, 1919, at his home in Brookline, Mass., having returned there from Washington only about three weeks prior to his death. For two years and a half he had been engaged on research problems for the Ordnance Department. He leaves a wife and a small son, Elihu Craig Thomson.

"Art" Shaw, captain 301st Engineers, has just returned from France, and expects to be discharged some time in July.

R. C. Glancy writes that he has not been in military service as was previously reported in the REVIEW, but that he has been "supervising the telephone plant

design for portions of Camp Dix, Hog Island, and various other shipyards near Philadelphia, together with the smaller jobs, such as storage depots for aviation, ordnance, etc." He was married in 1912 to Miss Alice W. Arnold of Marlboro, Mass., and has two "groundhands" and one "operator."

Theodore Elting Sharp was born March 30, 1919. Congratulations, "Chill"!

1910

DUDLEY CLAPP, Secretary, Gloucester, Mass.

There will be a howl when this REVIEW comes out, "Where are the 1910 Class Notes?" Your secretary has received one letter in the last three months — from Frank Bell. If the rest of the class care anything about the REVIEW notes, wake up and write!

Frank writes:

Dear Dud: Just a short note to let you know I am alive and kicking and very much married as per attached announcement.

Got my discharge from captain, Reserve Military Aviator, Air Service, U. S. A., last January.

Since February have been doing some special work in an organizing capacity with the Bureau of War Risk Insurance and will probably be with them for a half year or so.

Was not fortunate enough to get across, but have the usual hard luck tale, and was finally under orders when the armistice stopped me. Had quite an interesting time at the flying game in its various phases but as soon as the war was over I did not waste any time trying to get out, and succeeded.

Give my best to the old crowd.

Sincerely,

FRANK F. BELL.

The following from the "Providence Journal":

Captain Jenckes, who was graduated from the Massachusetts Institute of Technology, enlisted in January, 1918, and left Yaphank for overseas, where he began active service soon after his arrival in France. Captain Jenckes, who won three promotions while in France, fought at Soissons, Chateau-Thierry and in the Meuse-Argonne offensive.

"The Tech" got this:

Captain Edward Stuart, who is on a detail with the American Red Cross in Serbia, has recently been promoted to the rank of major in the Sanitary Corps of the army and recommended by the American Red Cross for the Red Cross medal for highly distinguished service. The letter received by Professor Sedgwick from him says in addition, "Southeastern and Eastern Europe are certainly in a terrible mess after the war, and many years of reconstruction will be necessary to re-establish the place. I hope that after my release from the army I shall be able to come over again to help. I have received orders to return home for demobilization and expect to reach the United States in the early part of May. We have lately had a rather serious outbreak of typhus."

I saw Colonel Almy a few weeks ago. He and Bradley Dewey are going into business for themselves in Boston. They were associated in Chemical War Service work.

Another classmate whom I ran into by accident but did not have a chance to talk to was Jerome Scheuer. He was looking well and red-cheeked as ever.

1911

ORVILLE B. DENISON, Secretary, 63 Sidney Street, Cambridge A, Mass.

HERBERT FRYER, Assistant Secretary, 162 Dartmouth Street, Boston, Mass.

ADDITIONS TO 1911 HONOR ROLL

NAME	COURSE	RANK	SERVICE
COLEBROOK, M. W.	V	1st Lieut.	C. W. S.
HUGELMAN, J. R.	I	Eng.	U. S. N. R. F.
JUDD, M. H.	I	Ensign	U. S. N. R. F.
LATHROPE, T. R.	VII		Sanitary Corps
OFENSTEIN, C. L.	I	Eng.	U. S. N. Exp. Avia.
RHOADES, W. G.	VI	2d Lieut.	Infantry
ROBERTS, W. L.	XIII		U. S. N., Const. Corps
RUSSELL, F., Jr.	II	1st Lieut.	Ordnance Dept.

Through the good offices of the Woman's Auxiliary your secretary has learned the eight additional names above, making the 1911 honor flag total one hundred twenty-six. Additional information has been received concerning men already on the list as follows:

NAME	COURSE	RANK	SERVICE
AARON, J. A.	VI	Corp.	Adv. Ord. Dept., No. 4, A. E. F.
BAKEWELL, D. C.	II	Capt.	O. D., U. S. R.
DRAKE, WHITFORD	XIIIA	Comdr.	Const. Corps, U. S. N.
FOSTER, W. D.	IV	2d Lieut.	40th Eng.
FRENCH, J. N.	IV	2d Lieut.	Aviation, A. E. F.
HANSON, R. T.	XIIIA	Comdr.	Const. Corps, U. S. N.
HARRIGAN, L. J.	XI	1st M. M.	U. S. N. R. F., A. E. F.
HARRINGTON, C. H.	I	Sergt.	301 Eng., A. E. F.
KERR, C. P.	II	Capt.	A. S. S. C., A. E. F.
LAWTON, S. R.	V	Capt.	C. W. S., A. E. F.
NEALEY, J. B.	I	2d Lieut.	346th F. A.
RUSSELL, FOSTER	II	2d Lieut.	A. S. S. C.
STRONG, C. R.	IV	Sergt.	A. S. S. C., A. E. F.
THOMPSON, M. R.	XIV	Sergt.	C. W. S.
WALKER, R. T.	IV	2d Lieut.	40th Engrs.
WARNER, W. W.	I	Cand.	F. A. O. T. S.
WOOD, HENRY	IV	2d Lieut.	C. A. C., A. E. F.

Your secretary will reserve for the postscript notes the decision to be reached regarding the permanent record of "1911 and the War." A meeting of the Association of Class Secretaries has been called for this evening (June 12) and a class dinner has been arranged for one week later. Both these meetings will be reported in the p. n.

Mr. and Mrs. John Harris Scoville announced the arrival on April 19 (Patriots' Day) of Isabel Goff Scoville. Congratulations, John!

"Joe" Aaron, VI, is back from France where he served in the Ordnance Department. Yep, he didn't "W. T. D." but he called Dennie up!—In a letter from Montigny Montford, France, dated March 7, 1919, Oliver Powell, I, stated that he was still a sergeant but hoped his bars would be forthcoming following his abbreviated training school course, said abbreviation being due to the armistice. He is acting as

editor of the book that the battery (Battery F, 309th Field Artillery) is to publish upon returning to the States, and is also on the committee which is getting out a regimental history, also to be published at the same time. He further says: "I did not have much faith in the university courses offered over here but believed that I would get more out of a course of reading of books from the American Library Association in Paris."—"Ed" Woodward, VI, wrote in April from Gievres, France, as follows:

This will let you know I am feeling fine and working quite hard in the Transportation Corps at Gievres, which is the largest intermediate supply depot in France. Of course what interests me most is the date of sailing. I have communicated with the Tech Club at Paris, but so far have been unable to go there. Good luck and best wishes to you and all the boys.

Look in on the secretary when you return.—Capt. "Alec" Yereance, I, wrote from France in mid-March a splendid, breezy letter and described a chance meeting with "Tunny" Parker, XI, at an advanced engineer dump beside the road leading to Chattancourt. He saw a "W. S." on Tunny's arm and didn't know what it meant, but found it meant "Water Supply." In speaking of a visit to Paris, Yereance said:

Please let me endorse the Tech Bureau and its activities highly: it is well known and liked throughout the A. E. F., as I have seen the Annex. Particularly I am grateful to the ladies of the Workroom who supplied the suit of unmentionables (well, evening clothes, if you like) which made bearable some chilly nights during the winter.

He is now on this side, having written on June 5 from Camp Dix.

Don Frazier, II, has completed his government work and since mid-May has been in Richmond, Va., where his former employers, the American Mutual Liability Insurance Company, have made him branch manager. He says he likes Richmond, except that it's awful dry.—The secretary had a fine chat with E. M. Young, I, who dropped in at 63 Sidney Street in late May. He had just completed his government work and had not settled down for the future.—Say, here's one—don't let on who told you, but listen: "Gutsie" Barker and "Groucho" Fryer have gone into business for themselves, the name of the corporation being the New England Dri-Kure Sales Company, with offices at 162 Dartmouth Street. Herbert Fryer is president and treasurer and Charles Morse Barker is clerk and manager. They have an exclusive Massachusetts agency for vulcanizing equipment and also carry a good line of tubes, tires and tire accessories. Best of luck to you, boys!—"Bill" Coburn, XI, has also gone into business with a partner, his partner being Francis W. Kittredge, a Yale and Harvard Law graduate. The name of the new concern is "Coburn, Kittredge & Company, Investments" and "Bill" describes it as "a newborn, though flourishing and rapidly growing financial power in the community, with offices at 10 State Street." Good luck, Bill!

The "Boston Record" of May 25 prints the following review:

For an evening of unusual enjoyment we recommend A. Washington Pezet's, III, most entertaining novel "Aristokia," published by the Century Co. (\$1.50 net).

The scene of this unusual story is a strip of land which has been kindly set aside in Central Europe for the downtrodden kings, kaisers, czars, etc., of the days before the world war. In this strip of land called "Aristokia" the erstwhile sovereigns are allowed to live as they please, provided they treat their servants according to union rules. An American male beauty, who manages to get into "Aristokia" some way or other, and who falls in love with the best looking princess in the whole place, is the hero of the story. His adventures and misadventures while in this strange land of fallen aristocracy make up a story that is full of excitement and amusement from start to finish.

It might be added that the author is a former student of Harvard and the Massachusetts Institute of Technology. Also that he was formerly the producing manager of the old Toy Theatre, now the Copley, in this city.

T. S. Killion, '11, III, is now discharged from the service and may be addressed at his home, 130 Russell Street, Malden, Mass.

Thorne L. Wheeler, X, and John C. Woodruff, X, announce that they have formed a partnership for the general practice of chemical engineering under the firm name of Wheeler & Woodruff, with offices at 280 Madison Avenue, New York.

POSTSCRIPT NOTES

Sixteen members of the class of 1911 gathered at the Walker Memorial at an informal dinner, Thursday evening, June 19. There was also present one guest, Corp. Lowell Bond, of the 101st Field Artillery, and a member of the firm of New England Dri-Kure Sales Company. Corporal Bond, introduced by Bert Fryer, gave an interesting and graphic description of the action that the old Battery A saw in France, and it was action. The '11-ers present were: Joe Aaron, Gutzie Barker, M. E. Comstock, George Cumings, Dennie Denison, Croucho Fryer, Tommie Haines, Ned Hall, Jack Herlihy, Art Leary, Bob Morse, Frank Osborn, O. W. Stewart, Ted Van Tassel, Frank Wood and E. M. Young. Following one of Mrs. McLean's characteristic meals de resistance an enjoyable round-table was held. Those boys who had not before done so at a local class dinner told in brief their records since leaving Tech, and the service men told of their records.—Frank Osborn, III, started out in the mining game at Porcupine, Ontario, but following a disastrous forest fire he moved on to a silver camp near Cobalt, Ontario. Then a classmate, Archie Orem, wired him to come to Nevada, and so he joined the Nevada-Douglas Copper Co. for a while. He then went to Great Falls, Mont., where he was at work until July, 1913. Under a three-year contract he then went to Chile to work for the Braden Copper Company. Returning in July, 1916, he went to Quebec, where he has been busy on war supplies until the armistice. He is now working up a mica mine in New Hampshire, prior to returning to the copper game.—E. M. Young, I, started out on construction work in Waterbury, Conn., where he was with the Jason Leather Company until just after the entrance of the United States into the war. In answer to a letter Morris Knowles says he spent six or seven months assisting in the construction of Camp Meade, spending the balance of 1917 at the Curtis Bay Ordnance Depot. He was then ordered by Major Wallace to the Edgewood Arsenal, and later by Major Gage to assist in the erection of the Government Training School near by. The balance of 1918 he spent under Major Blanchard at Brunswick, Ga. He successfully passed an examination for captain in the Quartermasters' Corps, but the armistice prevented the granting of his commission. In January, 1919, he took a trip through Southern Florida. He is now back in the Hub, and is with Benchley & Fox, Inc.

By the way, O. W. Stewart told the secretary that Harry Lord, II, was now the proud father of a daughter, Mary Southworth.

Joe Aaron enlisted in the Ordnance in July, 1917, and was sent at once to Camp Meade, where he said it was hot as —. Continuing, he said he sailed for France with the so-called "Fighting Ordnance Detachment," March 5, 1918. They landed at Bordeaux and went at once up just behind the front line trenches, where they formed Advanced Ordnance Depot No. 4. He was there until after the armistice. Joe told many amusing tales of the service.

Appearing for the first time, Bob Morse, VI, told the "story of his life." He started with the Pennsylvania railroad in Altoona, and four years later joined the Interborough in New York. A year later he went to Peru, South America, for a

year and a half with the Cerro-de-Pasco Copper Company. In the fall of 1917 he enlisted in the Signal Corps and went to Camp Upton, L. I., and later to Texas, where he received a second lieutenant's commission. After a short stay at Camp Sheridan his company was ordered on November 1 to be ready in seventy-two hours to leave for France. On account of the forthcoming armistice, the orders were cancelled, so he never left this side. He is now at home in Brookline.

Jack Herlihy, II, was commissioned first lieutenant in the A. S. S. C. in September, 1917, and went at once to Kelley Field in charge of the 109th Aero Squadron. Stopping en route at Garden City, L. I., the squadron sailed for France in December. They at once established a permanent repair and assembling camp in Romorantin, France. Liberty planes were handled almost entirely at the camp for observation and bombing purposes. While there Jack got his captaincy. The squadron waited two months and a half at Bordeaux before returning home last May. Jack is now back with the Edison Company here in the Hub.—Art Leary, XI, tried for an ensign school in November, 1917, but was rejected on account of trouble with one of his legs. He later underwent a corrective operation and was then drafted into the C. A. C., being stationed at Fort Banks. He successfully passed the entrance examinations for a F. O. T. S., and was sent to Fortress Monroe, but the armistice stopped his schooling. He said he was one of four men who alone were successful out of a field of two hundred and fifty men in passing a trigonometry exam, three of the four being Massachusetts Institute of Technology men and the other man a Worcester Polytechnic Institute graduate. He considered this a pretty good boost for technical training.—Bert Fryer, VI, went to Washington in July, 1917, as purchasing engineer in cantonment equipment. Instead of going into the service with a captaincy he received in the Quartermasters' Corps, he joined forces with the Emergency Fleet at Hog Island. In March, 1918, he came to Boston as manager of the New England Supply Division of the United States Shipping Board. At the conclusion of the war, as told in the original notes, the New England Dri-Kure Sales Company was formed with Bert as president. He has now gone back to his first employers, the B. F. Sturtevant Company in Hyde Park.—It was the sense of this meeting that it is wise, as planned by the secretary, to omit publishing a book concerning "1911 and the War," at this time, saving the records, as compiled, for the big book "Technology and the War," and for the big ten-year book to be published in 1921. By the way, the secretary wishes to urge his classmates to return the questionnaires to be sent out from the alumni office as soon as possible, with all available data, however meagre, concerning military, naval or civilian war service. Speed, accuracy and completeness are the three vital things necessary.—Oliver Powell, XI, writes that he arrived in the States May 10, and was honorably discharged May 26. He returned as lieutenant in Battery F, 309th F. A., having been commissioned in March. Almost as soon as he reached Boston, May 31, he received a telegram from the general manager of Dunn & McCarthy, Auburn, N. Y., asking him to rejoin the company, so he condensed a proposed five-weeks trip into one and went back to work June 9.—Lieut. Carl G. Richmond, II, arrived June 18 on the "Agamemnon" with the 605th Engineers, landing in New York.—Hal Robinson, I, couldn't attend the dinner because he was on his vacation on Cape Cod.—Remember, classmates: Speed, accuracy and completeness—and the greatest of these is SPEED!

CHANGES OF ADDRESS

Capt. Harry S. Alexander, 369 East Buchtel Avenue, Akron, Ohio.—David P. Allen, 1326 East 25th Street, Des Moines, Iowa.—Cedric S. Anderson, West Pennsylvania Power Company, Pittsburgh, Pa.—Robert E. Anderson, Truedell Apart,

ments, 231 East 4th Street, Cincinnati, Ohio.—John T. Arms, 70 Fifth Avenue, New York City.—Capt. Donald C. Bakewell, 912 Farmers Bank Building, Pittsburgh, Pa.—Charles M. Barker, 162 Dartmouth Street, Boston, Mass.—Allston T. Cushing, care of R. H. Cushing, Lancaster Heights, St. John Co., New Brunswick, Canada.—Capt. Richard W. Cushing, General Engineer Depot, 1419 F Street, N. W., Washington, D. C.—Lieut.-Col. Henry C. Davis, Jr., Benicia Arsenal, Benicia, Cal.—Clarence W. Dow, Braintree, Mass.—Com. Whitford Drake, Navy Yard, Puget Sound, Washington.—Rudolph Emmel, Casilla 655, Guayaquil, Ecuador, S. A., care of S. A. Development Company.—George B. Forristall, care of Foley Brothers Dry Goods Company, Houston, Texas.—Donald N. Frazier, 1215 Mutual Building, Richmond, Va.—Herbert Fryer, 162 Dartmouth Street, Boston, Mass.—Capt. John A. Herlihy, 72 High Rock Street, Lynn, Mass.—Howard P. Ireland, 60 Rotary Avenue, Binghamton, N. Y.—A. H. E. Kaufman, 185 Princeton Street, Lowell, Mass.—Edward Kennedy, 169 Beech Street, Holyoke, Mass.—Thomas S. Killion, 130 Russell Street, Malden, Mass.—Harry E. Lake, 40 Temple Street, Reading, Mass.—Stanley H. Lawton, 131 Monroe Road, Quincy, Mass.—Capt. Harold S. Lord, care of Ruggles Machine Company, Poultney, Vt.—Lieut. John L. McAllen, 328 Hassals Street, Portland, Ore.—Roy G. McPherson, Framingham, Mass.—William H. Martin, 1905 Woolworth Building, New York City.—Seymour M. Niles, 12 Orient Place, Melrose, Mass.—Morris Omansky, 15 Westminster Road, Roxbury, Mass.—Franklin Osborn, 2d, Eustis Mining Company, Eustis, Quebec, Canada.—Theodore B. Parker, Electric Bond & Share Company, 71 Broadway, New York City.—Foster Russell, West 2321 Boone Street, Spokane, Wash.—Hall Sargent, Grand Forks, N. D.—John H. Scoville, 3 Cottage Street, South Orange, N. J.—Capt. Roy A. Seaton, State Agricultural College, Manhattan, Kan.—Frank G. Smith, 108 Field Street, Torrington, Conn.—Lieut.-Com. Henry R. Snyder, 45 Mt. Vernon Street, Boston, Mass.—Lieut.-Col. Sidney P. Spalding, Fort Hancock, N. J.—Capt. Willson Y. Stamper, Camp Humphreys, Va.—Robert R. Stanley, Lincoln, N. H.—Maurice R. Thompson, 2408 Reisterstown Road, Baltimore, Md.—Guy W. True, Box 44, Balboa Heights, Canal Zone.—John B. Walcott, 734 Transportation Building, Chicago, Ill.—Ralph T. Walker, 231 Lenox Avenue, Providence, R. I.—William W. Warner, 172 West Perry Street, Titusville, Pa.—J. Craig Watson, Madoc, Ontario, Canada.—Lieut. Lawrence Watts, care of Col. Charles H. Watts, Fort D. A. Russell, Wyo.—Lieut. Russell D. Wells, Pottstown, Pa.—Thorne L. Wheeler, care of Wheeler & Woodruff, 280 Madison Avenue, New York City.—Sumner C. Willis, 47 Wheatland Avenue, Dorchester, Mass.—Ensign Robert O. Wood, Crescent Road, Concord, Mass.—John C. Woodruff, care of Wheeler & Woodruff, 280 Madison Avenue, New York City.—Erving M. Young, 11 Warren Street, Haverhill, Mass.—Joseph A. Aaron, 194 Rawson Road, Brookline, Mass.—Thomas H. Haines, 28 Radford Lane, Dorchester, Mass.—H. G. Jenks, 7 Peabody Street, Salem, Mass.—E. D. Van Tassel, Jr., 130 Franklin Street, Newton, Mass.—E. M. Young, 189 West Canton Street, Boston, Mass.

1912

RANDALL CREMER, Secretary, 7 The Circle, Rochelle Park, New Rochelle, N. Y.

Harvey Benson returned from France on Christmas eve. He is still in the service and expects to be for several months. He is located in the Trench Warfare Division, Office of the Chief of Ordnance, Washington, D. C.

Major Pierre Drewson was stationed at Fort Myers, Virginia, when last heard from.

Ward N. Gere was married on January 25 to Miss Mary Whitehead, daughter of Mrs. Herbert Shugatt of Lawrence, Mass. His brother, Lieut. E. C. Gere, '14, was best man.

Captain Chandler, now back from France, was a motor expert with the British Flying Corps during the Cambrai drive last April and May. During the action he received three machine-gun bullets in the calf of his leg.

Bates Torrey contributes his bit from 1410 S. Geddes Street, Syracuse, N. Y.:

Since leaving school, I have been doing chemical engineering work for the Semet-Solvay Company. Although a greater part of the time is spent in Syracuse (enough to warrant my establishing my family here), I have quite a lot of work in connection with the dozen or more plants of the company outside of Syracuse which keeps me traveling about one-third of the time.

You may be interested to know that there are two other members of M. I. T., '12, with this company: Murray Hastings, X, of Tech Show fame, and Bill Baxter, III. Murray has been spending about a year with the Ordnance Department but is expected to return to his former work shortly. Bill Baxter is at our plant in Portsmouth, Ohio, after having broken the hearts of all the girls in Syracuse.

We have a rather active Tech Club in Syracuse which celebrates once a month at the local University Club.

Ralph puts it in a slightly different way, writing from 2116 P Street, N. W., Washington, D. C.:

I have been in Washington during the war, where every one has been so rushed and there has been so much confusion that I have not seen many of the '12 boys lately.

I met in Baltimore last summer, A. G. Thompson on the day he received his commission at the Aberdeen Proving Grounds. W. G. Hammarstrom is chief engineer of the Lynchburg Foundry Company, Lynchburg, Va. G. B. Howard went to France as an officer in one of the railroad regiments and I have not heard from him lately.

As for myself, I went with the Sullivan Machinery Company directly after graduating as a sales engineer and am now in charge of their office in Washington. I was married in May, 1917, to Miss Frances Burchell Burt of Washington and have made my home here since my marriage.

If you or any other of the fellows ever get to Washington I hope you will look me up.

Walter Slade is now superintendent of power and lines for the Rhode Island Company, present address, 83 Grotto Avenue, Providence, R. I. He says:

I have not much to tell you regarding myself. I spent nearly four years in the laboratory section of the General Electric Company at Pittsfield, Mass., and left that work on September 1, 1915, to take up the work which I am at present carrying on. I am now serving the Rhode Island Company, the traction company of the State of Rhode Island, in the capacity of their superintendent of power and lines. In this connection I am responsible for the power generation and distribution which involves power stations, substations, transmission system, distribution system, etc. Our main station has a generating capacity of about 40,500 K.W. and we operate 450 to 550 cars at peak load according to conditions.

Stalker Reed writes us from Ojuela, Durango, Mexico:

I can't help out much on the whereabouts and doings of other '12 men as I hear from very few. I've been watching closer the movements and doings of Villa lately, so you will have to put up with a few words on myself.

To begin with, we have a candidate for Tech about 1940 in our family now, and he sure is a dandy fellow, too. Due to the above mentioned Villa I didn't see him until the day he was six months old, but we've gotten pretty well acquainted since then.

As to what I have been doing, I have been with the Cia. de Minerales y Metales for the past three years and am now at Ojuela as assistant superintendent of the Penoles Unit, Ojuela mines. We produce fifteen thousand tons of lead ore a month, so I manage to keep busy and also feel that my efforts were a little help to the winning of the war. I sure envy the fellows who were "across"; we ought to have some mighty interesting talks at our next reunion.

Jonathan Noyes, Duluth, Minn., writes:

Walter O'Brien, Course II, is a lieutenant in the army and is in the Ordnance Department, and was in France the last I heard.

I met Donald Radford, Course II, at Duluth the other day, he having just returned from the service. He is in the lumber business, located here at Duluth.

H. I. Pearl, Course I, is located in this neck of the woods at this time. H. I. has two dandy youngsters and he and his family spent Thanksgiving with us at Duluth, at which time we talked over 1912 men in general. Pearl is a member of the firm of the Associated Engineers of Crosby, Minnesota, and they seem to be very busy. Pearl is as wise as ever, and is not limiting his field of action in this North Country as he is spending this month at New Orleans, following up some work for one of their clients.

I hear from V. G. Sloan, Course I, better known as Doc, quite frequently. According to Doc he was in the first flying boat that flew under all five bridges across the East River, New York; that means between the bridge and the water. Doc certainly must be degenerating into quite a butterfly as he speaks of flying across the Hudson River and across New York City all in the same breath. The real news regarding Doc is, however, that on Thanksgiving Day his engagement to Miss Marian Hill of Arlington was announced.

I have been the district manager for the Sullivan Machinery Company in the Lake Superior iron and copper country for over a year now and feel quite well located here at Duluth. I have a daughter three and a half years old and a son one year old.

My address is 910 Alworth Building, Duluth, Minnesota. Radford's address is Donald Radford, in care of Radford & Wright, Duluth. Doc Sloan's is V. G. Sloan, The Franklin, Hardenbrooke Avenue, Jamaica, Long Island, N.Y. H. I. Pearl's address is Crosby, Minnesota.

Harry Babcock sends us the following from 735 Michigan Avenue, Evanston, Ill.:

I got back from overseas on the 23d of December, and got home in time for Christmas dinner.

After I got out of the army, I pulled out for Chicago, and after a month or so took my old job back at the University. I am now Associate Professor of Physics at Northwestern and I like the job first rate. I am still fooling around with ammonia and guess I will be until I die. Hope to have my first paper on the subject out some time this summer. I have most of my time for research with a minimum of teaching, which is the ideal combination.

I went to France as a flyer, but like a lot of the other Cadets, I got sidetracked into aviation engineering. I had some flying but spent most of my time while at Tours running the engineering shops and overhauling engines. While I was fighting that battle I ran across Dave Benbow, and also saw Arch Eicher. The first of July I was ordered up to Paris and joined the Engine Division of the Technical Section. Professor Riley of the Institute was head of this division with the rank of major. It was pleasant to be associated with him, and I left Paris with a still higher regard for him as an engineer and as a man.

A little later I was made Officer in Charge of the Engine Sub-Division of the Technical Data Division of the Technical Section (some title!) and was in charge of writing and publishing the engine handbooks and related information. I got one

of these finished, the 300 H.P. Hispano-Suiza, but the armistice came along and ruined the war and my hopes for publication at the same time.

Now that the war is over and I am back on the job the whole thing seems like a bad dream only; it is very hard to realize there ever was a war.

The Tech Bureau at the University Union in Paris was a great success, and owes its usefulness to the untiring efforts of Gibbs, who is a dandy.

Page E. Golsan, VI, is now assistant to the President of the Great Western Power Company in San Francisco, Cal.

Bartow V. Reeves, X, is 1st Lieutenant in the Ordnance Department, stationed at the United States Chemical Plant, Saltville, Va.

The marriage of Miss Helen Batchelder of Amesbury to Henry Noyes Otis, II, was announced May 31, 1919.

Walter H. Triplett, III, is now out of the service. He has just been married and expects to go back to his old job at Nacozari, Mexico, taking his bride with him.

From "The Tech" of January 18:

First Lieut. Herbert W. Hall, 44th Artillery, Coast Artillery Corps, was cited for extraordinary heroism in action near Thiaucourt, France, on September 27, 1918. Lieutenant Hall was in charge of a trainload of ammunition being sent to two eight-inch howitzer batteries in active operation against the enemy. Finding that part of the light railway track had been destroyed by enemy shell fire, he secured a detail of men under an engineer officer and worked with them to repair the track. When the engineer officer was killed by an exploding shell Lieutenant Hall assumed full charge and continued the work under heavy shell fire, showing utter disregard for personal danger, and inspiring confidence in men by his calmness, decision and courage.

The following article appeared in "The Tech" of December 28:

News of the death of Capt. Karl C. McKenney, '12, has just been received by his parents, Lewis T. and Katherine C. McKenney, 39 Chase Avenue, Auburndale, Mass. He died in France October 30 of pneumonia.

Captain McKenney was born in Charleston, Me., in 1890. He was a graduate of the Wellesley High School and of the Massachusetts Institute of Technology, in the Electrical Engineering Department, class of 1912.

He had been in the employ of Stone & Webster of Boston four years, in Houghton, Mich., and one year in the Public Service Corporation of Newark, N. J.

He enlisted in August, 1917. After three months at an officers' training camp, he received a commission as Captain and was attached to Battery E, 49th Artillery, C. A. C. He was ordered to Fort Andrews, Boston.

In April, 1918, he was placed in command of Fort Warren, which position he held until ordered to Camp Eustis, Va., to prepare his troops for overseas.

The fact that Captain McKenney was placed in command of Fort Warren, at that time the headquarters for all the forts in Boston Harbor, thus placing him at the age of only twenty-seven, and scarcely six months in the service, in charge of the defenses of Boston at a time when the nation was at war, with enemy submarines along the Atlantic Coast, testifies to his ability.

Captain McKenney was married in February, 1918, to Miss Virginia Courtney, daughter of Dr. Courtney, a prominent dentist in Hancock, Mich.

He was a member of the Wellesley Lodge of Masons.

The following is a tribute from the colonel of his regiment, Monte J. Hickok, Lieutenant-Colonel, C. A. C.:

"He died like the brave soldier that he was. We respect and honor the memory of Captain McKenney. We feel that he gave his life to his country as truly as though he had died on the field of battle.

"The courage with which he made the supreme test is an example to us all. We are proud to have had so noble an officer as a member of the 49th Artillery."

"Philadelphia Public Ledger" of January 14:

A chance acquaintance in the Midvale Steel and Ordnance Gun Plant, developing into a romance, culminated last evening in the marriage at the Temple Baptist Church, Broad and Berks Streets, of Miss Blanche G. Newell to Lieut. Edmund B. Moore, an assistant inspector of ordnance at the Midvale shops.

Of course, every one remembers Joe Champagne of Tech Show fame. We regret that lack of space forbids reproducing in full the articles appearing in the "Boston Post" beginning January 26, entitled "Can you Jazz? Learn in your own home how to do all the new fascinating steps."

We read on: "Here is a chance to learn from high terpsichorean authority the latest dances from Jazz to Military. Mr. Joseph L. Champagne, maitre de danse at the Copley-Plaza, will instruct Sunday Post readers how to do the Jazz, the Butterfly, the Bounce and the new military steps."

Follows the lesson, a little too intricate for us to comprehend with any degree of accuracy, but doesn't it beat all how the Tech training will fit you for anything? It's the technique that counts, of course.

In conclusion they give "A Word About Mr. Champagne":

"Tech" graduates will remember Mr. Champagne's dancing in the college shows before he graduated in 1912. He is still better known as the composer of the alma mater song for 1917, "Oh, Institute Technology," at the time the Institute was transferred across the Charles. Until the war broke out Mr. Champagne remained in Paris, giving exhibition dances with the well-known Parisienne dancer, Mme. Bailleul. Returning then to Boston, he organized, with the co-operation and assistance of the late Mr. Eben D. Jordan, the Boston Opera School of Dancing, with the idea of creating a school of American ballet. "America," says Mr. Champagne, "has as much latent talent in ballet dancing as has been developed in the Russian and Austrian schools."

Captain Mabbot, Fort Winfield Scott, San Francisco, Cal.:

As you know I have a captaincy in the Coast Artillery and went to France with the 58th Coast Artillery Regiment, landing in France about May. Some one discovered I had had Trig., etc., sometime in my career, so I was sent off to study artillery in the fourth dimension at American Anti-Aircraft School near Paris and there I was side-tracked to become an instructor and fought the now famous battle of Paris, being decorated at the Folies Bergere, Casino de Paris and other famous places. However the decorating was mostly of the interior variety which we find is taboo when we return to the United States. My commission is in the regular army, so I am still in but do not know for how long.

The Tech Bureau in Paris was a most welcome proposition and Gibbs sure was on the job for the boys. I went to the front near Nancy for a week with an Anti-Aircraft battery, but at the time things were pretty quiet and the most exciting thing we did was to pull corks. A few months in France will teach most any one to be a first-rate corkpuller. The battery I visited was very nicely fitted up—a pen of rabbits for rabbit stew on special occasions. I was fortunate enough to be in Paris on July 4 for the American parade, July 14 for the French celebration and for the night of the signing of the armistice which was really quite a celebration. I started back to the United States on the 18th of November and pulled in at Newport News and I missed the wonderful sensation of seeing the Statue of Liberty. While in Paris I saw Babcock, Charlie Carpenter, Benson, Harold Davis, and one or two other Tech men of 1912, including Bill Lynch—Bill was working just about as hard as he always did. It seemed just as natural to meet a man on the Avenue de l'Opera as it would on Broadway. In fact when I got back to New York I was there for three weeks and did not see a man I knew. I was in Paris during a number of air raids and Bertha bombardments but never seemed to get real close to any real excitement.

I am now in the fog and freeze of San Francisco. Say, if we only had a few real good liars back East to boom the wonderful climate of New England like they holler about their junk out here the railroads wouldn't sell a ticket for Frisco once a month. I suppose some parts of California are better, but Frisco is mostly rain or fog. It is a lively town, however, for they have about sixty "holdups" and half a dozen murders a week. I guess this must be the "Wild West" they used to talk about. I have tried to find some 1912 men in this vicinity but Bill Lynch is about the only man and I think he is still in the East or in France.

We need to get a little of this California "bull" into our news and make ourselves and everybody else think that we are the only class that ever attended Tech.

Since I have been in the army I have lost track of things, but now that I am back in the States I hope to pick them up again.

I wish any 1912 men in Frisco would look me up at Fort Scott — I hope to be there for a few months anyway. I have another daughter, born December 12, 1918. This makes two daughters — both girls! I was down in New Jersey a couple of months ago and saw Harrod Griffin at the Ridgewood station. He is working for the railroad. I made a hurry trip to Boston but found most of the boys away in the army.

Lieut. L. A. Matthews is at Camp Pontanezen, Brest, France. He writes:

In command of Sanitary Squad No. 116 (twenty-six men) and with five other similar units, we sailed from New York, November 12, reaching St. Nazaire, November 25, and received orders for Squads 115-116 to proceed to Brest.

Lieutenant Schaeffer, in command of 115, and I were then given orders to design, construct and operate a delousing plant. The plant was in operation December 29 and has been doing fine work ever since. The process is a bath with a specially prepared soap and sterilization of the clothing by steam under seven pounds pressure and it "gets" the cooties without any question. We have five sterilizers each with a capacity of thirty bundles of clothing but seldom have to work to capacity as we delouse only those men "caught with the goods" by medical examiners. All the other troops go through a plant of much larger capacity in which the clothing is sterilized by hot, dry air.

It is a pleasure to help the boys get back, but I'll be glad when my turn comes.

Graham Cole, now with the Southern Pine Association at New Orleans, tells us:

I have recently entered the service of this association as Director of Safety and Industrial Relations, having resigned as Safety Engineer of the Maryland Plant, Bethlehem Steel Company, on March 1. Sunday I had the pleasure of meeting D. J. McGrath, on the train from Washington. He was also on his way to new work, having just accepted the position of assistant to president of Mobile Light and Railways Company, Mobile, Ala.

Scanlon is now assistant purchasing agent for the Newport News Shipbuilding and Dry Dock Company, 233 Broadway, New York. He writes:

No, I didn't get into the service. I caught a severe cold in the first draft and had so much difficulty getting transferred for examination from Massachusetts here that I frankly admitted to my board, which was particularly long, narrow and wooden, that war was everything that Sherman said it was, so they did everything possible to honor me with one of those jobs that pays \$30 per day — once a month. However, six feet four and something inches is somewhat more than the standard depth of trench and the cost of changing the entire trench system would be, well — General Chowder said, "No," so I retrieved the dinner pail and climbed back up in Frank Woolworth's monument to the old job of buying insides for Joe Daniels' ferryboats.

But be that as it may, the war is now over in all but the strictest technical sense and I am beginning to find time to spoil good writing paper, so I hope to communicate with some of the old gang shortly.

I saw Sage at Squantum Plant just before Christmas. Married and has three youngsters.

Walker, II, was at Lake Torpedo Boat, Bridgeport, when I last heard of him. Stone, II, is with Sullivan Machinery Company, in Washington. He has accumulated a line of talk on air compressors that makes the machine either very necessary or non-essential, depending on which way you look at it. I am certain, however, that the machine is as good in its way as Stone is in his and I would be glad to recommend them both to any one requiring air in the compressed form.

E. L. Homan, 1st Lieutenant of Engineers, writes from Brest:

At Camp Upton, Yaphank, Long Island, as a member of the 302d Engineers, commanded by Colonel Sherrill, I managed to while away the time from September 4, 1917, to March 29, 1918, teaching rookies squads east and west. Not an alto-

gether disagreeable task since the drilling was interspersed with musketry, bridge building and other general military engineering works.

On the fateful day of March 29 my real war experience began. Every man was eager to leave for overseas, and when we left Hoboken and embarked on the "Carmania" every heart swelled with pride at the glorious deeds in which we expected to participate once we reached foreign soil. Our trip across was uneventful from a nautical standpoint, as no storms ensued, but from a social standpoint it was a distinct success, since we were accompanied en route by seventy telephone girls—dancing and spooning being quite "au fait." Since I was mess officer and below decks a good deal and as I am still heart whole and fancy free, I plead not guilty to the last indictment. Be that as it may, after picking up a British cruiser at Halifax, we landed at Liverpool on April 12, were railroaded to Dover, and after nearly losing my lunch in the English Channel, landed at Calais (vive la France) on April 14.

This period was just after the British retreat from the Cambrai salient and for two weeks it was an open question whether to send my division (the 77th) to the front line or not. The critical period passed over and I think luckily for us, as we were all greenhorns at this early date.

France appealed to us all as a land of stone houses and red-tiled roofs—a land undergoing very intensive cultivation. Our regiment was divided into two battalions of three companies each. One battalion billeted in a village called Meuncq-Nieurelet and the other at Ruminghen. My company, D, occupied the barn lofts of a well-to-do farmer and we officers lived in a small, cold Nissen hut.

We hiked for two weeks on practice marches and ended up each day with a battalion parade. About May 1 we moved and I was sent for two weeks training at an Australian Corps, where I learned a great deal about hand grenades and also about rare social proclivities of the "Aussies." Yes, indeed, the Australian officers were "hail fellows well met." Around May 20-22 we participated in a decision maneuver, having British officers as umpires.

About this period we were having "beaucoup" gas-mask drill and bayonet work under British sergeant instructors. On May 30, we hiked thirty miles inside of twenty-four hours and billeted at Locquinghen where we laid out some thirty-yard rifle ranges in near-by quarries. Then we marched and counter-marched until we entrained near St. Pol for the Bacarat sector. We arrived safely at Thion on June 12, and proceeded in easy stages through Rambervillers, Bacarat, to Pexonne. I shall always remember Rambervillers as the city where, as battalions billeting officer, I lodged my battalion in barracks, while my rival was forced to pitch pup tents in the rain (all because he ate lunch before seeing the Town Major). Well, we reached Pexonne all right under cover of darkness and discovered next day that several French batteries of seventy-fives were located near the village, even though it was still occupied by civilians. This was a so-called rest sector and we had relieved the now famous 42d, or Rainbow Division. About 3 o'clock the next morning we suffered an intense bombardment of gas shells and one platoon was annihilated by a box barrage that was concentrated on a small area. After this Hun greeting it was a real rest sector and our engineer company built artillery dugouts under occasional shrapnel fire and were going fine when I was ordered to the Army Engineer School at Langres with ten others on July 3.

It was a hard blow to leave my company at this time, as I knew and trusted every man. On July 11 I was ordered for duty with the 317th Engineers (colored troops), which is my present outfit.

J. I. Murray, 2d Lieutenant, Sanitary Corps, A. E. F., writes us:

Passed the Tech Club in Paris the other day on my way back from Coblenz, Germany, and saw a Tech REVIEW, which brought to mind the idea of writing. Since last summer have been working on water supply with the 26th Engineers, checking up quality of water.

Went through the St. Mihiel drive O.K. and after several days at Thiaucourt in part of Metz, left for the Argonne-Meuse sector. Our outfits landed at Auzeville on September 20, six days before the big drive in the Forest of Hesse. We got shelled a bit here along with the others in the sector, and went forward on the 26th towards Montfaucon. We finally got moved as far forward as Cierges and stayed there until the November first drive, when we moved forward to Nouart, about ten kilometers from Buzancy, where we had our headquarters until the armistice. After the 11th we moved to Loney, about twenty kilometers in part of Verdun, which was battalion

P. C. at the time. From Loney we moved forward to Maville, joining the 32d Division, with the Army of Occupation, and moved overland to the Rhine.

We crossed the Rhine just west of Coblenz and were billeted at Oberhieber in the forward area of the bridgehead. The Boche were very sociable during the trip and didn't give the doughboys any trouble, for which we were all duly thankful. My regiment started homeward on January 1, but I was detached for service at the new S. O. S. clearing station Le Mono, where I expect to sit and watch the A. E. F. pass by. Alas! why does water need to be watched!

Mowry sends the following from the Construction Department of Swift & Company, Chicago:

I started with Swift & Company about two weeks after graduation to learn the construction and mechanical end of the business at their St. Joseph, Mo., plant, being inducted into the service as a sort of private in the labor gang. I spent just about four years in St. Joseph and construction work incident to a large modern packing plant of thirty-five or forty acres' ground space. In August, 1916, I was called up here to Chicago as an assistant in the Construction Department. Although there are large plants and interests outside, still all the administration and determination of policy emanate from the main office here. After about eight months the party with whom I was immediately associated went to South America to build a new plant there, whereupon I took his place as construction engineer and have continued in that capacity for nearly two years.

Like many others I know I had longings to see some of the active service catering to the downfall of the Huns. However, efforts to keep up with the military and civilian demands for meat supply called for strenuous efforts at home and so I feel I was identified with a war necessity, especially as the necessary expansion was unprecedented.

Possibly you will recall I graduated in the Sanitary Engineering Course, whereas my work with Swift & Company has been largely civil and mechanical. However, my field has been very varied and interesting and my experiences only go to show that any of the big courses of the 'Stute qualify a fellow so he can adapt himself to a widely diversified range of opportunities.

I have been happily married nearly two years now and know you will be pleased to learn that our family circle also includes an embryo engineer going on eight months old.

I have seen only two 1912 men lately. "Jake" Pratt has held a responsible position for some time with the Liquid Carbonic Company and understand he has recently been made general superintendent. You can address him at their plant, 3100 South Kedzie Avenue, Chicago. I also see J. A. Noyes occasionally when he is in town. He is district manager with the Sullivan Machinery Company, Alworth Building, Duluth, Minn.

More news from John Hall, now in the Sanitary Inspector's office, Headquarters Embarkation Camp, Base Section I, A. P. O. 701, St. Nazaire, France:

Not more than ten minutes before receiving your letter of December 11, last evening, I had run across Lieut. William Lange of the Engineers, who said he had seen you in the not very distant past. He is on his way home after building camps and things over here, while I am among the unfortunates who are still on duty and shall probably have to stay until the last bugle calls.

Lange is only one of several Tech men I have seen here. Capt. Dave Benbow went on his way rejoicing a few weeks ago; Capt. C. P. Kerr, 1913, rested with us for a month; Lieutenant Carpenter, 1913, is stationed at the Base Laboratory down town. I came over with Lieut. L. A. Matthews of our class and Lieut. Robert N. Hoyt. Each had a sanitary squad like mine and they are now stationed at Brest and Bordeaux respectively.

You flatter me about my "success in military life." At the very best all I can say is that I have merely played around the edges of this war and done very little of importance. I am sure, to hear a gun go off would scare me to death. Briefly chronicled, my recent history is this: Left Camp Eustis, Va., in October and was put in command of a sanitary squad at Camp Crane, Pa. We did squads east and columns west for awhile and got together our overseas equipment. We loafed around Camp Merritt, N. J., for ten days, while news of armistices, imagined and real, whistled

over our heads. Somebody decided we should come anyhow; however, who or why I haven't found out, and we landed here November 25. Since then we have done odd jobs at a couple of hospitals and are now helping the men get home. I am the sanitary inspector of the Camp, under the embarkation surgeon, and my squad of road-builders, miners, teamsters, and near-engineers have been transformed into clerks, orderlies and adherents to the peaceful arts of kitchen and barrack police. The chief indoor sport is wondering when we are going home. At the present rate of shipment of about one boat per week our hopes of going soon are not very great.

I am wondering about the more-distant future—if Tech has established an old soldiers' home or a bread line and soup kitchen for her repatriated and impoverished sons. A labor bureau might be a good idea with an assorted line of "Boys Wanted" on hand. Have you any need for an energetic and willing office boy? If so, I apply.

The following business notice has come to us:

LUIS R. GONZALEZ, B.S.
INGENIERO ELECTRO-QUIMICO
DE MASSACHUSETTS INSTITUTE OF TECHNOLOGY
MIEMBRO DE LA AMERICAN CHEMICAL SOCIETY

Tiene el gusto de informar a Ud. que ha abierto su Laboratorio Químico equipado con todos los aparatos modernos necesarios para toda clase de análisis e investigaciones científicas relacionadas con su ramo.

Especialidad en análisis de abonos, terrenos y productos minerales, con diez años de experiencia en los departamentos de investigaciones de las grandes fábricas de abonos de Armour Fertilizer Works de Chicago, y Piedmont Electro-Chemical Co. de North Carolina.

Gustoso de poderle ser de alguna utilidad ofrece sus servicios profesionales y pone a sus ordenes su Laboratorio en la Avenida Ponce de Leon No. 198, Parada 21. Telefono 560, P. O. Box D., Santurce, Puerto Rico.

This is the real stuff.

Dave McGrath writes:

I got my discharge from the well-known and justly famous army of the United States of America on the 24th of February, and after a short vacation at home, accepted a job as assistant to the president of the Mobile Light and Railroad Company, in which job—I mean "position"—I have to make believe I know something about civil, electrical and mechanical engineering, law, accounting, finance and management. Of course I haven't any of those qualifications, but I have "something just as good"—Nerve!

The only class news I have concerns W. G. Cole, Course I, whom I met on the train on the way down here. He was going to New Orleans to take charge of all "Safety" work for the Southern Pine Association. As he promised me that he would write you, I shall let him speak for himself.

B. V. Reeves writes us from the United States Chemical Plant at Saltville, Va.:

I left the New Jersey Zinc Company and Palmerton, Pa., where I had been for the past five years, last May to take a commission as first lieutenant in the Ordnance Department. Was immediately ordered down here and here I have been ever since. This plant was only under construction then and I spent about three months breaking in enlisted men on the process at a near-by plant. When we did start up I was a department superintendent but the armistice came too soon for us and we never got to operating on a large scale although we kept going until January 5. And now for civilian life again.

Just one more bit of news. I expect to be married this summer to Miss Beatrice Roth, of Weatherly, Pa.

Kebbon sends the following from Camp A. A., Humphreys, Va.:

I am sending you herewith a short account of the alumni banquet held in the new Walker Memorial building (over the construction of which I labored, you will remember).

During the afternoon of the day of the banquet a few 1912 men appeared on the scene and one of the small rooms used for student activities was set apart for our class to congregate in. The only entertainment provided was an execrable band concert in the gymnasium, not necessarily the fault of the performers, but rather of the person who selected the gym for the musical program, for the reverberations were tremendous, and the notes of a succeeding measure returned to wrestle with those just issuing from the various instruments and went to the mat together in resounding discord. However, the noise served to draw a crowd like vinegar will flies—and it was not long before the music was drowned out by the hearty salutations of reunited classmates and Tech brothers. Gradually, the Walker Memorial filled to well-nigh overflowing and on the sounding of a bugle call—familiar now to so many of us—a general stampede was made for the big dining hall, splendidly adapted to such an affair, with its rows of noble columns flanking the sides and leading up to the great fireplace beneath the bust of General Walker, in front of which was placed the speaker's table with the class tables—filling the entire area and then some. For there were nearly seven hundred sons of Technology gathered together, many of whom have not seen one another for many years, and many in khaki with overseas stripes on their sleeves.

Our class table was placed near the entrance in the center of the back row where the cold drafts from the Charles now and then sent shivers up and down the spines of the less hardened, and I hate to think of the number of years it is going to take to move us up near the speaker's table where the drafts will be reversed. However, there were gathered together twelve lusty members of the Class of 1912 as follows:

Frederick J. Shepard, Jr., N. T. McNeil, F. H. Busby, Elliott Tarr, O. C. Lombard, "Johnnie" Lennaerts, J. S. Tirrell, H. E. Kebbon, Clarence Morrow, J. N. Morley, D. J. McGrath, Hugo Hanson.

*** We managed somehow to give as loud a cheer as any of the classes, and when it came to singing all eyes were turned towards our table, I trust because of the close harmony that issued forth. At any rate after the dinner, Dr. Maclaurin told me that he recognized me by the dark void caused by my opened mouth during the rendering of the Stein Song. The dinner was extremely well cooked and well served to those within hailing distance of the kitchen—which of course did not include us—but some day we will be able to get our dishes hot off the griddle when we have our eightieth reunion. Dr. Maclaurin gave a splendid word picture of the Institute's activities at present and of the pressing problems confronting him for the immediate future. President Morss also gave an interesting resume of the Alumni Association activities of the past year. But most of us left before a gentleman from Harvard—I forget his name—delivered his final crushing, telling point after several hours of a fervid speech on "Labor," as if we did not know as graduates of Tech what that word represented.

It was a most enjoyable occasion and it seemed mighty good to get back and feel the old spirit of good fellowship warming one's heart after the separations of the last two or three years—and as we say at camp at the conclusion of some wild poker party—"A pleasant time was had by all."

I am still at Camp Humphreys, but expect to complete a voluminous report on the architectural development of a Permanent Engineers' School and Post accompanied by a great many drawings, by May first, upon which date I have requested my discharge from the Engineer Corps and closely following thereafter I expect to locate in New York, to become associated with Welles Bosworth in the practice of architecture. In that case I may see you occasionally. Here's hoping.

From the Boston "Globe" of March 18:

March 18—Capt. Herbert W. Hall of the 44th Coast Artillery Regiment, whose home is in Winsted, Conn., and whose business is in Boston, today received at Fort Totten the Distinguished Service Cross for extraordinary heroism in action.

The presentation, which could not be made in France because of delay in certification of the award contained in army orders of January 21, was conducted with full overseas ceremony by Brig.-Gen. John D. Barrett, commander of the Middle Atlantic Coast Artillery District.

Captain Hall was decorated for "calmness, decision and courage" in carrying out under heavy shell fire at Thiaccourt, France, September 27 last, the transporta-

tion of ammunition to howitzers in action against the enemy. He was then a first lieutenant.

Captain Hall is still in service, convalescing from a gas attack which affected his lungs.

Before Capt. Herbert W. Hall went into service, he was a hero of the Class of 1912 at Technology. In 1909, three fuses on a large switchboard, controlling the entire lighting system of Technology Union, 42 Trinity Place, blew out, setting the woodwork ablaze. Hall rushed in the dark to the switchboard, came in contact with a live wire and was stunned by the shock, but seized a fire extinguisher and put out the flames.

In Tech he was interested in all college activities, was business manager of "Tech," member of the class football team and of the Electrical Engineers' Society, Cosmopolitan Club, Beta Theta Pi fraternity and tug-of-war team.

After graduation, he entered the employ of the Fuller Construction Company, later becoming a superintendent in Boston. In May, 1913, he became an efficiency engineer, with offices here. He was born in Cliftondale, April 2, 1889, and prepared for Tech at the Gilbert School. His father, Harry P. Hall, is a piano manufacturer, located in Philadelphia.

1913

F. D. MURDOCK, Secretary, 438 Huntington Avenue, Buffalo, N. Y.

A. W. KENNEY, 1214 West Tenth Street, Wilmington, Del.

It was the secretary's pleasure to stand up with our old war horse, Bill Mattson, while he promised to obey, etc. The ceremony took place at Marlborough, Mass., June 7, and Miss Mabel Leighton is now Mrs. Mattson. Bill was discharged from the army a month ago, and is with the Babson Statistical Organization in Wellesley. On May 1, Ted Hersom was married to Clara P. Somes at Gloucester, Mass. The engagement is announced of Miss Mae Clark to Edward N. Taylor. Frank T. Smith, XIV, late lieutenant of Heavy Artillery, is engaged to Ethel F. Schuman. Smith is doing some temporary work for Professor Hayward. "Dutch" Franzheim, IV, the rascal, has taken to himself a wife. He was married May 12 to Elizabeth F. Simms, at Mt. Airy, Ky. "Dutch" was in the flying service and was discharged last December. He is now in Chicago with Weary & Alford Co. William F. Black, III, is engaged to Miss Miriam Stevens. So much for marriages. Now for results. George Richter writes us real proud that he is father of a bouncing boy, George A., Jr., born April 22. George remarks that he sure is a dandy and will enter Tech about 1937. George is back as chemical engineer for Brown Co., at Berlin, N. H. He was discharged from the Chemical Warfare Service on December 31, his rank being major. Bob Bonney, X, sends a picture of two healthy, good-looking youngsters. He is to be congratulated.

We come now to the most important matter of recording what our returned soldiers have come back to do. Caleb C. Pierce, IV, is practicing architecture, after having been a first lieutenant of Field Artillery. Allan S. Beale, I, was discharged last December from the Flying Corps. Clarence S. Roe is still in France, a captain of engineers. A short time ago he was transferred to the Transportation Corps doing railroad work in France. A. R. Atwater, VI, was discharged last February a second lieutenant and is now with the Salmon Falls Manufacturing Co. of Boston. Gardner Alden was a captain in the Quartermasters Corps and discharged April 7. He is a chemical engineer with the Dolge Felt Co. E. H. Smith, III, is still in the navy, a first lieutenant. At last that long silent wallaby, Eddie Hurst, has come to life. The first thing of importance to say about Eddie is that he is now a married

man, having been married February 26, 1918, to Miss Harriet M. Case, at Hartford, Conn. This circumstance ought to give us reasonable assurance that Eddie is now somewhat tamed down. Every one who will know him will recall that he was a pretty wild young man at school. Ed was discharged from the service in January as a first lieutenant in the air service. He writes:

After learning to fly I fought the Battle of Waco, Texas, in charge of Airplane Construction and Maintenance. Another Tech XIII man by the name of Crocker came to the flying field at Rech Field, Waco, Texas, and he was found to be so rotten they sent him overseas at once. Otherwise he was a mighty nice boy and gained distinction by making some blackboard sketches entitled "Faith," "Hope," "Charity" and "Purity." You know, Fred, Crocker painted a Tech Show Poster, and therefore he concluded that a sketch of Purity would or should be in his line. But Purity was somewhat bold in displaying her physical charms and the colonel thought so too. Crocker was court-martialed and I had the unique distinction of being the judge advocate. We certainly enjoyed the trial but poor Crocker failed to come across with anything but a mighty long face. Aside from "calling him down" for one hour and fifteen minutes and confining him to the post over Sunday, nothing was done to him. Well, Fred, it is easy enough to lose a live gang like the '13 bunch and a fellow really must step lively. In order to maintain your activities on our behalf I am enclosing the masuma requested. Let me hear from you and with kindest regards to your wife and family and trusting this finds all our old gang hale and hearty.

Albert Buck is a major still in the service. He has had charge of relief work in the Balkan states. He was formerly in Saloniki. He went abroad first with Dr. Strong to Serbia to aid in the suppression of typhus.

A. C. Goodnow, X, was discharged in March as a warrant machinist. He is now with George F. Goodnow, gas engineers, at Highland Park, Ill. Fay Williams, II, is a captain in the Ordnance Department. He states that he hopes to get out of "This Man's Army" very soon, and expects to join the staff of Scovell Wellington Co., Boston.

L. E. Wright, XIV, was discharged last December as first lieutenant in Chemical Warfare, and is now with W. B. Pratt, Inc., as chemical engineer in charge of construction. He writes:

I am glad to get a Boston job and return to "Beantown." McDonough & Robinson ('13, Course X) are the only chemical engineers in Boston, according to the 'phone book. They are at 45 Milk Street, and are enjoying prosperity, though they just started in.

Ted Hersom, VI, was discharged from the navy as ensign in April. He is temporarily with the firm of Hersom Bros., caterers, at Winchester, Mass.

The secretary met John F. Foley, VI, at Bill Mattson's wedding. The boy is certainly the picture of health and seems to be enjoying life. He was discharged as first lieutenant on May 15, and has not yet gone into business.—Merwin H. Ward, XIII, was discharged last December as first lieutenant of Ordnance. He is now field director of Associated Industries of Missouri, with headquarters at St. Louis.—Mark W. Reed, IV, was discharged last February as sergeant in the Camouflage Section. He is now following his profession as playwright.

Edwin D. Pratt, I, was discharged in February, a second lieutenant of Field Artillery. Ed had more than his share of hard luck, but is now back on the job as aide to the general manager of the Childs Restaurant Co. He writes:

I graduated from Saumur Artillery School under French direction and from heavy artillery school under American direction. I had the spinal meningitis; was out of active service three months, but one was a vacation, getting well at Nice, etc. Had Christmas card from Professor Spofford, met Macdonald at University Club, Paris, and several Tech men in same course with me. Tech Red Cross Aux-

iliary right on the job and Gibbs certainly made things attractive and cheerful for the boys who called on him. Never will forget the excellent services of the Red Cross at every stage of the game.

Phil Barnes, X, was discharged last December as an ensign. He notes:

While in the navy I was assigned to engineering duties in connection with production of hydrogen and helium for kite balloons and dirigibles, interesting work. Released December 22, and am back on my old job in the New York office of the Pfandler Co.

"Twink" Starr, I, was discharged in May, a captain of Field Artillery. For the moment he is engaged in what he terms (loafing for myself). He is sorry that he hasn't a bit of news to send as he has just recently returned from a year in France. He says that he may get over it in time but doubts if he will ever be the same again. Francis H. Achard, VI, after refuting the secretary's implication that he might be a mummy, states that he is still in the service, a captain of engineers. Don Van Deusen, II, was discharged in May, a captain of Field Artillery. He is back at his desk as secretary-treasurer of C. A. Van Deusen Co. at Hudson, N. Y. He notes:

I am not there when it comes to this remark stuff. I like to read the other fellows' but can't seem to spill any of my own.

Leroy R. Block was discharged from the navy in February a lieutenant. He is now with the Tileflex Metal Hose Corporation as assistant sales manager, located at Newark. Some time ago we heard from Tom Lough, I. He wrote:

Better late than never. Have recently received my captaincy and am still in the Troop Movement Section of the General Staff S. O. S. at Tours. But within a few days I expect to be relieved from duty and ordered back to the States and hope to arrive in New York about April 1. Last month I spent three weeks in Italy on sick leave—wonderful trip. Stopped at Monte Carlo and Nice on my way back.

Dick Cross, VI, is probably learning to talk Spanish to beat the band. He writes:

The April copy of the REVIEW has just come in and I realize that my annual report to you must be due. Only I am not sure that it is not biennial this time.

From August, 1917, until December 15, 1918, I was one of the four million who disguised themselves with khaki, and incidently learned that the four years' grind at school has nothing on the work they expected of one at an officers' training camp. I chose the Coast Artillery Corps, and it proved to be just that; I spent exactly one year at Fort Constitution, New Hampshire, in all the grades from "shave tail" up to captain.

My resignation was accepted in December, and I hustled back to the old job with the Aluminum Company in Pittsburgh. In a short time I expect to sail for Europe, and eventually land in Spain, where we are to open a new office in Barcelona. So I shall fool them after all, and see something of the other side. My address will be as usual, care of the Aluminum Company of South America, 2400 Oliver Building, Pittsburgh.

The following clipping was taken from "The Tech" of April 2, 1919:

Lieut. W. Greenville Horsch, of Newburyport, Mass., son of Mr. and Mrs. William M. Horsch, who was recently discharged from the United States army, in which he had served in the warfare service, has gone to New York to attend the sessions of the American Electro-Chemical Society, now in convention there.

Lieutenant Horsch was engaged in war work in Washington, D. C., Columbia University and at Niagara Falls, being associated with Major Wilson, a well-known chemical engineer holding a high place under the government. He has been selected to read an article descriptive of his chemical warfare work, which is accounted a high honor. Since receiving his discharge from the army Lieutenant Horsch has been engaged at the Institute.

Aubrey Burnham, VI, has recently opened a branch office as sales headquarters for the state of New Jersey, at 912 Kinney Building, Newark, N. J., representing the Lord Electric Co. and the Lord Construction Co., constructing engineers.

C. J. Berry, electrical engineer with the National Lamp Works at Cleveland, has resigned to take up engineering work with the firm of Brandt et Fouilleret at Paris, France. Mr. Berry has been with the National Lamp Works for six years, becoming connected with that firm after being graduated from the electrical engineering course at the Institute. During 1918 Mr. Berry served as a first lieutenant in the United States Air Service in France, where he undertook radio and aviation lighting work. While with the National Lamp Works he has been the inventor of several electrical devices for use on lighting distribution systems. Mr. Berry is an associate member both of the American Institute of Electrical Engineers and of the Illuminating Engineering Society.

The following notice of the death of Harold S. Birchard was sent to the REVIEW office recently by his mother:

Harold S. Birchard, twenty-eight, eldest son of Mr. and Mrs. A. R. Birchard of 44 Lafayette Street, died in St. Vincent's hospital, New York, following a ten days' illness with pneumonia. Mr. Birchard was born in Norwich, Conn., February 19, 1890. He was graduated from Holyoke high school in 1906, and later attended the Massachusetts Institute of Technology. His business life was spent in Pittsfield with the General Electric and Berkshire Magneto Companies. He had just completed arrangements to enter business in this city. While in Pittsfield he was a member of the school committee. He married, November 21, 1912, Miss Ethel M. Harrington of this city, who survives him. Besides his widow and parents he leaves two sons, Stuart and Wesley, three sisters and four brothers, all of this city.

H. M. Laurence, III, writes that his term of military service was very brief as he was at Fort Slocum only two weeks and received his discharge fairly promptly after the armistice was signed. He is back in his old position with the Kenecott Copper Corporation at Latouche, Alaska.—E. R. Norton is a lieutenant commander in the navy, stationed with the Lake Torpedo Boat Company at Bridgeport, Conn.—J. E. Adler, X, was discharged as second lieutenant of the Field Artillery last December.—Sam Rogers, II, was discharged from the Field Artillery Ordnance Department in February a second lieutenant. He is back on his old job of insurance engineer with F. S. Smith Insurance Service, Boston.—Max Shafran, V, is still at the Watertown Arsenal as metallurgical chemist.—P. V. Burt, VI, spent ten months helping to keep the fleet supplied. He was not lucky enough to get any sea duty, but had some extremely interesting work, so he says, and plenty of it. He is back on his old job with Babson's Statistical Organization, Wellesley Hills, Mass.

Another of our long lost sheep turns up in the person of Franklin Hutchinson, Jr., X. He is in the Patent Department of the Western Electric Company of New York City. We can see Hutch blush when he wrote that he was married on June 15, 1918 to Miss Marjorie Rollhaus. He writes:

I feel as though I had but little right to try and break in on the class of '13 now, although I did in fact graduate with that memorable class. I'll bet that not one of the original bunch has held off so long before he deigned to write to his old friends of Massachusetts Institute of Technology. And the worst of it all is that I haven't got a decent excuse! But I have decided to reform, and plead to be allowed to get back in the best society "what is," that is—provided nobody has seen fit to read me out.

Three years ago I decided to abandon the life of a chemical engineer, and accordingly enrolled in the Law School of New York University from which I will graduate next Wednesday. I intend to devote my time from now on to the study of patent law. Know all men by these letters patent! During the war "my bit" was small—as I stayed at home like a great many others and tried to put my knowledge of chemistry to a useful purpose. Although we often heard it said that we are helping

to biff Bill, nevertheless we stay-at-homes feel that the man who actually threw his very life into the mouths of the hellish man-consumers deserves the credit and praise. I hope that the fellows will enthuse in regard to the reunion in 1920—and you can just bet that I'll be there in the regular old-time spirit if I am still in existence.

Regards to all the members of Course X—including Kenny—and you might tell the latter that punning has about ceased.

A. E. Burnham, VI, extends an invitation to his classmates to visit him in Newark. He writes:

Last summer and fall, before the armistice was signed, I was in the field organization of the Lord Electric Company, engaged in getting delivery of the enormous quantities of the electrical material being installed at the navy and war office buildings at 19th and B Streets N. W., Washington, and while in that vicinity I had the pleasure of meeting a few Tech men who all seemed to be doing important work in the military service. Later, at Tulleytown, Pa., I was engaged in similar work in connection with making complete electrical installations at the Mamouth DuPont Loading Company's plant being built there.

Since then I have been in our sales engineering department at New York and recently have opened up a branch office for the Lord Electric Company and the Lord Construction Company at 912 Kinney Building, Newark, N. J., to take care of new construction developments in the State.

My company's president, Mr. F. W. Lord, and the chief engineer of the Lord Construction Company, Col. H. M. Waite, are both Tech men and if any of the fellows are interested in having first-class "Tech" talent install their plumbing, heating, electric work, and other mechanical equipments "we're it." Would be glad to have any of the fellows call on me when in Newark.

John H. Hession, I, claims to have the best concrete waterproofer on the market, "Ironite" is its name. John is in charge of the Boston office of the concern which is dealing in this remarkable substance. The only thing that the secretary knows about concrete waterproofing is that which he had from the lips of the eminent waterproofing engineer, "Twink" Starr. He asked Twink which was the best waterproofing for concrete and got this reply, "There ain't no such thing." But, of course, this happened several years ago, and John may have something at that. —D. V. Downs, II, is still an employee of the E. I. DuPont, DeNemours & Company as an assistant engineer, and is at present located at Flint, Mich., where their company is building one thousand houses for the General Motors Corporation. —Henry A. Burr, I, writing from Nashville, Tenn., states that he is still sawing wood and keeping his eyes open. He is figuring on coming up to Tech next June for a visit at the reunion. While on the subject of reunion, we might say that from several enthusiastic comments on this subject from members of the class, it looks as though everybody was keen for it and you can rest assured that we will pull off something real next summer. —The name of Graham Harris, X, appears on our class list. He is third concert master of the Detroit Symphony Orchestra. He has also made some very successful concert tours through this country.

He notes:

I don't know if this notice was meant for men who did not finish their course; especially if they left in order to embrace a line of work entirely foreign to technical matters. Music has always been my forte, but old M. I. T. '13 will always have a warm spot in my memory.

B. E. Brooks, IV, is an architect with the Youngstown Sheet and Tube Company at Youngstown, Ohio. —M. W. Merrill, XIV, after a short service in the army is with the United States Metals Refining Company of Chrome, N. J. We are glad that he had decided to stay in this country. He notes:

After getting out of the army the good old U. S. A. looked too good to leave, so I decided to cut loose from the Chile Company and appear to have been very for-

tunate in making my present connections. I surely hope that the wanderlust won't get me before next June as I most assuredly would like to attend the reunion in 1920.

Larry Hart, XI, is living up to the big things which we expect of him, and is now sales manager in charge of the Chicago branch of the H. W. Johns-Manville Company. He writes:

Last month, our former sales manager resigned and I have been appointed his successor. The Chicago branch covers the northwestern territory of the country, with jurisdiction over seventeen States. This broadens my work very much as I am now in charge of the sales of our entire line, while heretofore I was a department manager for only a few of our products.

Walter E. Merrill, XI, served for a short period in the army as second lieutenant in the Sanitary Corps. He writes:

Am still on the old job with the State Department of Health. Gage is also here since his return from France. Nothing very exciting to report. Hoping you are well and prosperous.

Don't fail to read what W. A. Bryant, I, has to say: He notes:

Was recommended for second lieutenant in Ordnance and was within three days of having orders sent me to report when Baker put through his order that no civilian of draft age could have a commission. Draft board subsequently put me in Class V. Therefore, I took a civilian job in Washington. Was with United States Housing Corporation, Department of Labor, as office engineer, becoming acting deputy district engineer at the close of hostilities. My work covered housing projects in the Hampton Roads district, Philadelphia and Quincy, Mass., although being office man I had a general knowledge of all the projects. My work was intensely interesting and ended all too quickly. Whereas most of the war workers hated Washington, I grew to like the place and I certainly hated to leave when my work was done. Perhaps it was due to the exceptional living quarters that I obtained and the very pleasant people I lived with, but whatever it was, I wish I could go back again for a bit. There is always something new to be seen again. I was in a position to become acquainted with some of our leading lights and therefore knew considerable of what was happening. People outside have little knowledge of what those near by think of our president.

After getting married my wife and I went to Washington on our honeymoon and had a most glorious trip home over the road in an automobile of a friend. Even though it was January, the weather was excellent.

At present I am hard at the structural concrete game and am doing the structural design of two large six-story buildings here, each costing about one-half million dollars. One is for the Noyes-Buick Company as a salesroom and service station and one for the Goodyear Improvement Company as a storage warehouse for the Goodyear Tire Company. Both buildings are designed by A. H. Bowditch, architect, who has come to us for the structural features. Believe me, it keeps you hustling good and plenty. Besides this, we have just designed a garage 250 x 70, two stories that is quite some job.

On April 5 Bob G. Daggett, XI, was married to Miss Louiseanna Hess, Vassar, 1916, of Louisville, Ky.—J. B. Woodward, Jr, is still with the Newport News Shipbuilding and Drydock Company as head of the engineering estimating department. He notes that he would like to know the address of O. M. Arnold and H. B. Harrison, both Course VI. If those reticent gentlemen will send their addresses to Woodward at 4875 Washington Avenue, Newport News, Va., or to the secretary, their courtesy will be appreciated.—H. P. Fessenden, I, states very briefly, "Am in New York on a big job and too busy to say much of anything."—Victor Mayer, I, has his own offices as consulting engineer at 15 East 40th Street, New York, N. Y.—That personal engineer, Si. Champlin, V, is now in the biscuit game. He writes:

I got fed up on soup and had to turn to crackers. If I had a dollar I would send it, but haven't heard of any food chemists getting rich on war business. Hope to be

in Boston in 1920. Haven't seen the good old town since the fall of 1915, three and a half long, sad, lonesome years. Horsch and Merrill, both XIV, '13, went through our baking plant recently and I saw Atwater, VI, '13, a few days ago.

Paul V. Cogan, II, writes:

On leaving the "Stute" I went with the Fore River Shipbuilding Corporation and have been with them ever since, coming to Bethlehem when they centralized their engineering force here last summer.

I am not married and since no young lady down here seems to require the services of a first-class husband my chances of joining the benedicts in the near future seem rather slim.

In response to the remark: "Don't be a mummy," Lindsley Hall, IV, writes:

Thanks for the admonition. I may need the advice more than most of our class, inasmuch as I work among the mummies of the Egyptian Department of the Metropolitan Museum, and we've all heard of these cases of propinquity.

Last year I spent several months at my home in Portland, Ore., drafting for a shipbuilding concern, but after the signing of the armistice I returned to my old work in New York, and am now hoping to go to Egypt again this coming autumn.

If you are thinking of jumping off write to Florence Furniture Company. W. E. Caldwell, X, is general manager. He notes, humorously:

The above name is a misnomer, as we manufacture caskets and burial cases. While I do not wish any of the boys hard luck, still if they want to get measured in advance and have their wooden kimono ready for them tell them to write me. Am a partner in the above firm and expect to devote the rest of my life to looking after its growth. It is not a new concern but an old established one and a few of us have obtained all the common stock.

Just because we didn't tell Jim Beale, XI, where to send his dollar he is kicking. He states that we have a record of his marriage, and also that he hasn't changed jobs. Good luck to you, Jim!—Who in the world would expect such levity from an instructor of physics at Massachusetts Institute of Technology? Note the humor of Joe MacKinnon's, VI, remark:

All right, all right, you win. We will remain Rummy, but after July 1 we might just as well be a mummy. Old Rameses and his gang may still have some of their private stock on tap, even though they are nearer the Sahara than we are.

Halsey Elwell, II, was discharged from the army in December a first lieutenant of Infantry. He is now with the Walter M. Lowney Company, of Boston, Mass. Read the comment of Walter Palmer, who was a special student in our time at the Institute.

Too much Victory Loan, Salvation Army, etc., now, but will send the iron man soon. I want to state that although I was at Tech only one year and know practically none of the fellows, it was one of the important years, yes, the best spent year of my life. Having worked a year after graduating at Haverford College, I was very intent on getting back to work and did not avail myself of the opportunity of "getting in" with the 1913 Tech men. I wish that I had.

G. F. Haglin, II, was discharged from the army a first lieutenant. He is now with C. F. Haglin Sons Company, Construction Engineers of Minneapolis, Minn. It is interesting to note how the war was responsible for the saving of paper. G. E. Harmon, Special Biology, writes:

I have had an unusually busy year, and teaching in a medical school this year has been anything but easy. There have been many interruptions because of war activities and training. The head of the department in which I teach has been away on war service. This has meant that I have acted as head of the department. In addition I have been acting as chief of the Bureau of Laboratories and the Cleveland

Health Department. It has been necessary to curtail research and thesis writing this year to a very marked degree. I have, however, found time to do some lecturing for the Red Cross on hygiene and related subjects.

"Ad" Cardinal, XI, was married March 1, to Eleanor M. Agnew. Ad is a full fledged manufacturer who speaks for himself. He writes:

Quite a number of events have taken place since I sent you the last large check. My father died on February 22. I was married on March 1, and I have had a strike and settled it during the same period. Between getting out three income tax reports, looking for a place to live and keeping this factory going, the Jersey mosquito has not had a real chance to puncture me this season.

Just at present we are living at the Arcolo Country Club, and intend remaining there until we get into our new home in Montclair, which will be finished, we hope by September.

I thought that I might get to Boston this month to help my young brother Paul find the location of Tech, where he expects to go in the fall of 1920, but he is taking the college entrance exams near here, so the trip wasn't necessary this year.

I'm sorry to say that I haven't seen any '13 fellows in quite a while, but now that the war is over I have hopes of running into a few in New York.

If you ever get near New York and have a few hours to spare, tip me off and I shall try my best to meet you either in the big city or out here.

R. E. Palmer, II, was married December 24, 1918, to Miss Mary Heslop of Port Robinson, Ont. He writes:

For the past two years I have been busy with the construction and operation of a plant at Thorold, Ont., for the manufacture of artificial abrasives, trade names "Exolan" and "Carbolon." In other words, converting Niagara power into rough stuff. July 1, 1919, I will start in with the Stevens-Duryea Automobile Co. just out of Springfield, Mass. Have enjoyed the past few years in Canada. I like the Canadians (married one), as they are the only people who hate the Germans worse than we do. Hope to see more 1913 Tech men at my new location.

E. E. Gagnon, II, having manufactured all the marble available in Vermont, is now production superintendent with some machine company whose name we might give you if "Mons" could write more legibly than he does. "Mons" wishes us to kindly advertise for the addresses of Shrimp Loeb, E. Bull Germain, Eddie Hurst, the Australian philosopher, and long Walter Byland. He writes further:

I was in Boston March 1, but there was a conflict between the B. A. A. meet and the alumni feed. Me for the sports every time. A kindly gentleman got me a seat with the Back Bay highbrows and I demoralized them when we licked Dartmouth, and when young Bauden cleaned up the field in the six hundred, with my wild yells and whoops. They don't know what lungs are for; I exercise mine.

Was in town again a week or two ago to the I. C. A. A. A. A. meeting. I generally approve of the way they run things and was satisfied with my trip.

William Guild, XI, is with the Beacon Falls Rubber Shoe Company in the Foreign Department with offices at New York City. He reports the birth of a son, William Guild, Jr., on November 12, 1918.—R. D. Bonney, X, is chief chemist with the Congoleum Company, a department of Barrett Company.

With deep regret we announce the death of three of our classmates: Thomas S. Manley died on March 13, 1918; William D. Stevens died of pneumonia at Aberdeen, Md., October 19, 1918; Edward D. Donald was killed by an accident in the British Forgings Limited plant at Ashbridges Bay, Toronto, in June, 1918. His father sent a copy of a letter written by his employers following his death. It is a letter which must have given a father a good deal of consolation.

Karl Briel, I, is in France and we hear from his sister that he was slightly wounded on September 29, 1918. From that time until the end of March of this

year he was at the base hospital and later at various camps waiting to be sent back to this country. Before he got notice he was one of the eleven in his division chosen to attend a university in England, France or Scotland for a few weeks before returning, and he was assigned to the London School of Economics, London, England, where he is at present and has been since the end of April, but he expects to leave England July 6.

Tenney L. Davis, V, was discharged, a first lieutenant, in April and is now an instructor of organic chemistry at Massachusetts Institute of Technology. He notes:

Overseas with A. E. F. for seven months. Pleasant times in Paris with George Gibbs and the Tech crowd—Christmas dinner at Cafe Cardinal.

Arthur E. Bellis, V, is now a major in the Ordnance Department. He has been at Springfield since June, 1917, organizing a metallurgical division in charge of all testing and heat treating; work which required building a laboratory and re-equipping hardening and annealing plants.

William E. Herron, II, is a very busy new man. His time is partly occupied in the various capacities of owner and manager of the Ford Shop and Agency, president of the Citrus Company packing house, and manager of the Aroca Edgewood saw mill at Inverness, Fla.—G. M. Rollason, X, was with the Canadian forces and also with the United States Engineers and United States Chemical Warfare Service. He was a captain at the time of his discharge in January of this year. He is now research engineer with the Aluminum Castings Company of Cleveland.—E. L. Bray, VI, is salesman for the Fairbanks Morse Company at Philadelphia. He was discharged from the army in December, a second lieutenant.

On December 19, 1918, fifty per cent of the girls in our class were married. On that day Marion Rice, X, became Mrs. R. W. Hart. Will the Wilmington, Del., papers please copy this intelligence?—Frank H. Mahoney, V, was discharged from the Air Service in February, a second lieutenant. William De Young Kay, VI, is in Central America for the Franklin Baker Company.—R. F. Gans is in the Army of Occupation of Germany as motor transportation officer of the 90th Division.—“Rusty” Sage, I, is now Southern manager of the Aberthaw Construction Company with offices in the Peters Building, Atlanta, Ga. He notes:

Why the devil do you wait for a reunion until I go South? It's always my luck. Hang around Boston three years waiting for it to come off and then meet another postponement. However, I hope to be there.

W. G. Horsch, XIV, is a research associate in the Research Laboratory of Applied Chemistry, M. I. T. He writes:

Arrived! A daughter, December 21, 1918. After a year of frequent change of abode while connected with the Research Division, C. W. S. I have settled at Waverley, Mass., and now divide my time between research, the baby, and a victory garden, really all research!

P. C. Warner, IV, is in the Naval Flying Corps, U. S. N. R. F. About himself he says:

Commissioned ensign March 5, 1918. Promoted lieutenant (j. g.) October 1, 1918. Am a naval aviator, designated. At present I am the aide to Commandant Naval Air Station, Pensacola, Fla. Received my flight training at Key West, Fla., and completed same at Pensacola Naval Air Station. Expect to get out of service this summer.

S. D. Shinkle, V, was discharged in January, a first lieutenant in the Chemical Warfare Service. He is now a research chemist with the Goodyear Metallic Rubber Shoe Company at Naugatuck, Conn.—G. E. Leavitt, Jr., II, was discharged last

December, a second lieutenant of the Field Artillery, having been promoted from a private. He is still with the Southern Cotton Oil Company on the chief engineer's staff. He notes:

Enlisted May 17, 1918, with 4th O. T. S. at Camp Devens. Was transferred to Company Zachary Taylor, Ky., when all Field Artillery units of O. T. S. were concentrated there. Commissioned on September 24, and retained as instructor in Field Artillery Central Officers' Training School until December 7, 1918. Enjoyed the experience very much. Tech may be considered a grind but let me tell you the training camps had something on Tech in that respect. Has any one heard from Gagnon lately?

F. H. Kennedy, Jr., IV, has started an architectural office of his own in Pasadena, Cal., and reports that he is doing a rushing business. Albion Davis, I, is beginning to feel lonesome in Keokuk. He writes:

We are still in Keokuk on the Mississippi. The family is all well and fine. Our young daughter Eleanor will be three this August. It's been five straight years now for us in Keokuk. We hope to get back East on a visit this fall. I was much interested in the photograph of the Alumni Dinner in the April REVIEW; '13 had a good showing as usual. It seemed good to see some of the familiar faces again.

Work keeps me active and very busy. I have been doing considerable efficiency work of late, both hydraulic and electrical. I have been endeavoring to strengthen the little electrical knowledge we got in Course I with correspondence work, but find it hard to give the proper amount of time to it. I have taken up tennis this year, as a pastime, but as yet am only in the beginner class.

Here's looking forward to seeing some of the fellows this fall and wishing everybody the best.

After spending eighteen months in the Chemical Warfare Service as a first lieutenant, H. R. Wemple, X, took a job with the Texas Gulf Sulphur Company in the sales department.—R. C. Thompson, X, is in charge of heel making at the Hood Rubber Company and he is anxious to have any members of the class who may be in his vicinity visit him at his new home. His telephone is Newton North 2479-W.

William C. Purdy, VII, is with the United States Public Health Service. He writes:

In time of war the United States Public Health Service automatically becomes a part of the United States forces, by presidential proclamation, to serve wherever needed. In this sense I was in the service and was assigned to study methods of control of mosquitoes in rice fields near cantonment acres. The object in view is control of malaria.

K. B. Blake, XIV, was discharged in February, a captain in the Sanitary Corps of the Chemical Warfare Service. He is now chief chemist of the North Star Chemical Works of Lawrence, Mass.—R. F. Braly, I, was discharged in May, a first lieutenant of Engineers. He is now assistant engineer with the Emergency Fleet Corporation. He notes:

After having been stuck in one camp (Shelby, Miss.) for the entire duration of the war was glad to get a change of scenery. In this town as in others the June-bug singeth, the buzz-saw buzzeth and the Whangdoodle mourneth for her first-born. Here, however, as a recreation we can watch Congress perform.

P. S. My boy can lick any kid in the block.

E. D. Yerby, I, is a second lieutenant of Cavalry in the regular army. He likes the job and is thinking seriously of remaining on it.—H. I. Green, II, is a fire protection engineer with the Underwriters' Bureau of New England, Boston. He was discharged in December, a second lieutenant in the Air Service.—H. G. Burnham is still in the service and is expecting his discharge shortly. He intends to take a job with the George Close Company, candy manufacturers, of Cambridge.—H. J. von Rosenberg, IV, is still in the air service, a first lieutenant. He writes:

While in the air service my station was Ellington Field from December 15, 1917, to date, except for one month at Garden City, L. I., arriving there the day of the premature peace celebration, November 7, 1918. Being bound for the American Bombing School at Claremont Ferrand, France, as executive officer for the school. In this country I served as C. O. first Cadet Squadron, O. I. C. Theoretical Military Instruction, organized the Bombing School, made inspector and investigating officer, auditor and survey officer, assistant executive officer and summary court officer, and later chief engineer officer of the field. I am leaving the service on June 20, 1919, and will go into business with my father at Hallettsville in merchandizing, banking, cotton and real estate. In addition I am superintending the construction of the new \$65,000 school building.

T. J. Lough, I, was discharged in April, a captain of engineers. He is now construction engineer with the North Dakota Highway Commission. He has charge of highway construction on Federal Aid highway projects out of New Rockford, N. D. He writes:

Back to lavender Bostons, flappy trousers and bathtubs. The only features of army life in France that we have missed so far are the sunrises and cognac. Yesterday we saluted a colonel and in doing so, knocked our straw hat off into the mud which cost us three dollars and showed us what life in the army will do.

Miles Langley, I, was discharged in February, a lieutenant of Field Artillery. He is now with the Portland Packing Company of Portland, Maine.

M. J. Smith, VI, is still in the service. He writes:

It has been nearly four months since I came back from France. I could not get my discharge at once due to wounds received on October 2. But I have been busy, nevertheless, and just completed a manual on the "Sound Ranging."

I expect to be discharged about July 1, then I will have to get busy again. It is too bad that I can't get into civilians before June 30. There is a long dry spell coming.

I saw Phil Barnes in Washington not long ago. I recognized him at once, although I have not seen him since June, 1913.

It is about time to pull off a reunion and think we will all be ready for it by next year.

We have the following information regarding Dr. John W. Brady from Mrs. Brady:

Dr. John W. S. Brady entered United States Navy, May 1, 1917. Served at the Chelsea Hospital for three months, then was sent to New York to study under Drs. Flexner and Carroll. Afterwards sent to Washington Naval Hospital, then stationed at Newport Training School and was then put on an oversea transport until August, 1918, when he joined the United States Marines 13th Regiment, and is now serving with them in France. His address is F. W. S. Brady, Lt. M. C. U. S. Navy, 3d Batt. 13th Reg. United States Marines, A. P. O. No. 705, France.

E. O. Upham, XIV, is with the United States Rubber Company in the footwear manufacturing division. He is doing general planning and efficiency work.—R. L. Thomas, VI, is just back to this country and received his discharged in May, a captain of engineers. He expects to return to his old position as engineer with the Pennsylvania Water and Power Company at Baltimore.—I. W. Knight, VI, is electrical engineer for the General Fire Extinguisher Company at Providence. He is engaged in experimental and research work in connection with fire extinguishing apparatus.—M. W. Leonard after spending a year in France touring in box cars has returned to his old position with the Public Service Electric Company in their testing laboratory at Newark, N. J.

G. H. Sickels, II, is the proud father of a son, born on June 3. He is truck transportation manager of the Mexican Petroleum Corporation at Providence, R. I.—A. F. Brewer, III, is very enthusiastic over his new job, with the Texas Company. He was discharged in May, an ensign in the navy. He writes:

Could not keep away from examinations even in the navy. Right after enlisting they sent me to the United States Navy Steam Engineering School at Stevens Institute of Technology, Hoboken, N. J., where I graduated as engineering ensign. Got a corking course in steam engineering, really like a post-graduate course. Spent over three months in the war zone as Junior engineer watch officer on United States Steamship "Edward L. Doheny," third in the Adriatic and Mediterranean Seas. Sure did have some "Cook's Tour" via the navy. We touched at Newport, R. I., Port Arthur, Texas; Ponte Delgade, Azores Islands; Gibraltar, Messina and Gallipoli (Italy), Venice; Trieste, Pola and Spalato, Austria. Oh! it was a great way to see Southern Europe de lux, free. The only mar to our joys was the presence of Austrian mines in the Mediterranean and Adriatic Seas. They soon become common, however. We used our Otter Gear (mine cutter) a good part of the time and did most of our traveling in the Adriatic by day. Venice, of course, made the greatest impression on me. It's a wonderful city and I sure made best use of my shore liberty there.

I am now with the Texas Company in New York as a mechanical engineer with the export department.—Mr. W. W. Stevens, class 1898, at the Stute is my chief. Never has my future looked more encouraging, if I am able to make good in the oil game. The Texas Company is the best of concerns to be with, and I sure am digging in to make good and prove a credit to myself and to the class of 1913.

A. G. Waite, III, is a captain in the army, assigned to the office of Secretary of War. He is busy on re-employment work for discharged service men.—H. F. Sutter, I, was a cadet in the Aviation Section of the Signal Enlisted Reserve Corps when his discharge came last November. He now has charge of all the state bridge work for Nebraska with sixteen engineers in his department.

1914

H. B. RICHMOND, Secretary, 12 George Street, Medford, Mass.

1914 HOLDS FIVE YEAR REUNION

No class in the entire history of the Institute has experienced such a kaleidoscopic turmoil of world events in its first five years as a graduate class as has the Class of 1914. When at Trinity Church in the peace of that calm Sunday afternoon in June, 1914, Bishop Lawrence preached our baccalaureate sermon we little appreciated how prophetic would be his words. As we look back it seems as if his sermon was the very steeling of our being for the caldron in which we were soon to find ourselves engulfed. On the second day after we had been enthralled by that sermon we went forth into the world as Technology alumni. The industry of the nation was at a low ebb. Employment was difficult to secure, and within sixty days, before a bare half of the class had secured positions, nearly all Europe was ablaze with the greatest conflagration of ages. For a time the industry of the whole world stood aghast, then came the powerful reaction. Event followed event; then in April, 1917, the flame of strife spread to the United States. At the very time when we were starting our business careers and forming homes for ourselves we found it necessary to put them all aside and to take up that challenge which Bishop Lawrence had given us three years before — that even in our darkest hour must we never fail to enforce right over might, for out of our greatest struggle would come some great and lasting good. Into the war we went, from the submarines of the sea to the outposts of No Man's Land 1914 men were found. Two more years have passed and once again is peace returning to the world, but not without our having made that precious sacrifice. Fifteen of our number are represented by golden stars — among them are two of

our former presidents. Thus we held our first five year reunion as a fitting close to a period of turmoil and sacrifice.

Reunion headquarters were established at the Hotel Brunswick in Boston on Friday, June 13. The program of the day was entirely informal, consisting of visits to the new buildings in Cambridge and of informal luncheons. In the evening a lobster salad buffet supper was served and a smoker and a lively business meeting followed. C. J. Callahan, who has served as secretary for the past two years, found it necessary to resign. Cal said that it is business and not marriage which forced him to take this step. H. B. Richmond was elected to take his place. Because of the many changes brought about by the war the class address index was found to be very much out of date. J. A. Judge, VI, agreed to furnish all printing and paper required to get the necessary information to correct this list. With such a generous start the secretary assures the class that the index will speedily be brought right up to the minute.

At this meeting the class resolved to place on record its expression of appreciation for those of its number who paid the supreme sacrifice during the war, and that the sympathy of the class be extended to the families of those men.

On Saturday, June 14, Class Headquarters was transferred to the Boulevard Hotel at Nantasket Beach. An all-day outing was enjoyed. A ball game, bathing, a trip through Paragon Park, and a big shore dinner were features of the program. The pleasure of the party was increased by the presence of the wives of several of our classmates. Those present were Mesdames Affel, Atwood, Merry, Perley and Zecha. G. K. Perley, Jr., age six months, was the youngest member of the delegation. Some difficulty was experienced by the fact that F. G. Perry, '09, formerly instructor in the Electrical Engineering Laboratory, was running a Sunday School picnic on the beach. Of course this fact did not bother the married men, but many of the members of our class are still enjoying single blessedness. When at 7 P.M. the party arrived back in Boston every one agreed that they would await eagerly the ten-year reunion when a big time is in store. **PREPARE FOR IT NOW!**

The closing date for this issue of the REVIEW had already passed before your new secretary took up his work. It was, accordingly, too late for him to collect any notes other than to report the events of the Reunion, a full account of which appears in the front part of this issue. However, you are promised that in the next issue the complaint will come from the editor because too much space has been taken, rather than from the class because there are not enough notes.

1915

WILLIAM B. SPENCER, Secretary, 527 North Grove Street, East Orange, N. J.

FRANCIS P. SCULLY, Assistant Secretary, 5 Exeter Park, Cambridge, Mass.

We can give no tribute great enough, pay no homage deep enough to honor the memory of our beloved classmates who have died on the battlefields of France, or in the service, for the freedom of their homes and their country.

Ralph Reed Malcolm, sergeant, A. E. F., whose home was in Stoughton, Mass., died on his way from France on the steamship "American," on March 6, 1919.

Lieut. Frederick S. Hartman, of the 345th Aero Squadron of the Second Army, was killed in an airplane accident at Toul, France, on April 7, 1919. His home was

in Brookline, Mass. He came into national prominence in February, 1917, through his participation in the longest dog sled race in the world, the Red River-St. Paul Carnival Derby, five hundred twenty-two miles, from Winnipeg to St. Paul.

Lieutenant Hartman was killed in the Toul airdrome. He had just returned from a two weeks' furlough and had expected to be released from service April 15. He would have been twenty-nine years old on April 14.

He enlisted in November, 1917, and began training in aviation at the Technology ground school, later being sent to Ellington Field. He went overseas last October after specializing in various branches of the aviation service.

Fate certainly seems to deal harsh blows, especially when fellows have weathered the chances and dangers of deadly warfare only to be "taken west" just on the eve of the time when they will see their home shores and be greeted again by loved ones.

We extend our sincere sympathy to the relatives of Malcolm and Hartman and deeply mourn their loss as our classmates.

Capt. Douglas B. Baker has written us from the Army of Occupation briefly outlining a few of his experiences in the war. With his customary modesty he did not mention that he had won the Distinguished Service Cross for extraordinary heroism in action. We will let you read his letter first, then his citation taken from a newspaper clipping, and be glad that a fellow of his sort of stuff was a classmate in 1915:

I'm not much of a correspondent, that is evident for this is the first time you have heard from me for eighteen months. The chronicle of my actions during that period is comparatively short.

In spite of an infantry commission, a fatal tendency toward telephony landed me in the signal platoon of H. Q. Co., 80th Infantry, back in the fall of 1917. In February, 1918, an advance party from our division, the Third, was sent across to Chatillon-sur-Seine to school. I was at the signal school there.

The 30th Infantry saw its first action early in June north of the Marne, then was shifted to Mezy about ten kilometers east of Chateau-Thierry, the souvenir center of the American tourists.

The first two weeks of July were fine. Everything in the gardens was ripening; wild strawberries were plentiful and free fireworks every night until the 14th of July. The regiment stayed and later crossed the Marne, but I started a tour of France the next day because of a piece of shell in the hip, what the English very properly designate as a "cushy." The tour ended at Bianitz, where I spent six days late in September at the convalescent hospital. Bianitz is a wonderful place for swimming, so they say, but the pleasure was denied me for various reasons.

I rejoined my regiment October 2 just north of Montfoucon and was lucky enough not to be wounded during October. At one time I was the oldest officer, in point of service with the regiment, on duty so you can see there were many sad changes in the personnel. We came back to be filled up with replacements early in November and were preparing to go in again when the armistice was signed.

The longest hike of the war was that into Germany following the signing of the armistice. The outfit is still there and probably will be when you get this letter. I, however, am fortunate enough to be at the University of Lyon studying French and subjects which are useful in foreign business under the provision which our benevolent government has supplied to us. At every French University there are a number of American students taking a four months' course closing July 1. Those of us in the Army of Occupation return to Germany at that time; the rest go home.

I have been much more fortunate in the army than I had any reason to expect, but nevertheless, I look forward to a return to civilian life as soon as possible. As yet, it has not been necessary to engage a secretary to care for the inquiries from anxious prospective employers.

Remember me to the 1915 men you run across.

For extraordinary heroism in action near the Bois de Beuge and Bois de la Poulteriere October 9-15, 1918. During this period Captain Baker made several trips through heavy shell, gas and machine-gun fire, to repair broken telephone and tele-

graph wires, and when they could no longer be repaired, he personally carried messages through the shell-swept area. On October 15, he personally reconnoitered the Bois de la Poulitiere, under heavy machine-gun and shell-fire in an endeavor to find a suitable place for his regimental post of command.

The secretary and Mrs. Spencer were pleased to receive a personal call from 1st Lieut. Parry Kellar, Ordnance Department, U. S. A., and his sister, Miss Kellar, in the latter part of May. Parry looked very well and seemed in excellent spirits. In response to the secretary's request for some "dope" Parry sent in the following letter:

When I visited you recently at East Orange, you brought up the matter of getting as many of the crowd as possible together next spring in Boston, to celebrate the fifth anniversary of our graduation. Thinking the matter over, I am of the opinion that it is good dope and propaganda should be started to help the cause along.

There are quite a number of Tech men in Philadelphia, but I have met very few of the class of 1915.

"Jack" Dalton is holding a responsible position in the Philadelphia office of the Liberty Mutual Insurance Company. I have been out to lunch with him on various occasions and he talks very enthusiastically about his work. "Jack" is also secretary of the Tech Club of Philadelphia, and is very active in its doings.

"Pop" Wood is with Stone & Webster, on the Hog Island project, and manages to get around to most of the Tech Club meetings. For some reason or other, Pop seems to like the Quaker City very much.

J. F. Guthrie is with the Abrasive Company of Philadelphia as mechanical engineer. Guthrie is married and has a very pretty home in Germantown.

Fred Hurlburt is with the du Pont Company in Wilmington, but occasionally is to be seen in Philadelphia.

In regard to myself, I am still in the army, and have been assigned to the Philadelphia District Ordnance Office for the last six months. I am doing appraisal and plant investigation work for the Philadelphia District Claims Board, and have found it very interesting. My work has taken me to such plants as the Bethlehem Steel Company, Baldwin Locomotive Plant, Eddystone Rifle Plant, and various others.

I expect to be discharged from the service about the 1st of July, but will be around town for a couple of weeks after that. Remember me to all the fellows and tell them to drop in to see me when they are in town.

Another interesting letter to Professor Sedgwick has been given us from Lieut. Forest J. Funk, United States Sanitary Corps, who was a student in biology at the Institute and has spent the past winter midst the rigors of the climate of Archangel. We quote his letter in part:

DEAR PROFESSOR SEDGWICK: Your letter of December 5 reached me yesterday, just two months old. It is a long call from England to Archangel, but it took only a few minutes at a conference in London to decide upon my coming. Sanitary science is still in the embryonic stage here and public health has not yet been conceived of. It is hard for one to imagine the spring and summer conditions, who arrived when the temperature registered fifty degrees below zero, Fahrenheit. The great Divina is now a broad snow field across which long caravans of one-horse droschkes laden with wood that costs \$16 a cord, or teams of reindeer that seldom draw anything but their drivers. The white birches that line the broad streets are burdened with numberless crows, strangely bold scavengers that walk the sidewalks here as fearlessly and freely as do the pigeons the streets of Boston.

Churches wonderful without and gorgeous within adorn the whole city, but their splendor contrasts rather vividly with the squalor of many of their parishioners.

Immediately upon my arrival I was made sanitary officer of the American N. R. E. F. From the present indications I shall have my hands particularly full next spring. During the past month I have been supervising from the sanitary point of view the remodeling of kitchens and the construction of baths and proper latrines. I am now organizing a sanitary squad, the chief duty of which during the winter months will be the operation of baths and delousing plants which are being hurried to completion. I am specializing on delousing because of the constant danger of typhus in Russia. In a few days I hope to leave for an extended inspection of our

front lines. At a movie the other night a scenic reel of many familiar places in Boston made me homesick.

Oliver G. Norton, our senior vice-president, has been promoted to captain in the A. E. F.

Lieut. Gabe B. Hilton of the 347th Field Artillery, A. E. F., was in the REVIEW office April 22, just before leaving for his home, 375 Washington Street, Oshkosh, Wis. He is now discharged from the army.

Another boost in the class roll comes with the announcement of the birth of Augusta Jordan Alger to Mr. and Mrs. Philip L. Alger on June 4, 1919, 5 Mercer Circle, Cambridge, Mass.

Mr. and Mrs. Everett Brigham have another baby daughter, born in the early part of June.

Theodore Main, son of Mr. and Mrs. Charles T. Main, was married to Miss Marion Hall at the home of the bride's parents, Mr. and Mrs. Frederic D. Hall, Winter Hill, Somerville.

Main enlisted in the Coast Artillery at the beginning of the war, transferring to the 26th Division. He has just received his discharge after eighteen months' active service in France. He is now connected with the Slater Mills at Webster, in which town Mr. and Mrs. Main will make their home.

Just before sending these notes to the REVIEW office we were grieved to hear of the death of Mrs. John M. Walker (Martha B. Wells). She died on October 10, 1918, in Brooklyn, N. Y.

ON THE PART OF THE ASSISTANT SECRETARY

G. F. Nixon, IV, was detailed on construction work overseas and spent the greater part of his time building hangars and aviation fields. The love of travel has gripped him and he expects to go out to California with no definite prospects, mainly for the sake of seeing the country.

Clive Lacy, VI, was a second lieutenant in the Aviation Section. He returned from overseas about the middle of May and when seen intended to enjoy life in National Glacier Park for a while before settling down to hard labor again. He expects to locate in New York.

Louis Zepfler, V, went overseas with the 55th Coast Artillery, but for the greater part of the time was engaged in chemical service in Paris. He liked it so well that he rather expected to return to France for the Standard Oil Company. It would probably be a good idea to have Louis around at the Class Reunion next year to explain the attractions which France holds for him.

C. Loring Hall, I, who for a while represented '15 in Hong Kong has returned to the old home town. After getting out of the service he went with the Westinghouse Electric Company and is now in their Boston office.

Weare Howlett, X, writes that he is a hard working man out in Kokomo, Ind. Weare is pretty modest in his statements but it is understood that he has had considerable to do in jumping the annual business of the Kokomo Tire & Rubber Company from \$2,000,000 to \$5,000,000 annually. Weare is now boasting of Mary Jane Howlett and having attended a reception held for the youngster on the first visit to Boston the assistant secretary admits the praises are justified.

Lester Morse, I, is one of those who keeps in touch very well. The following letter, headed McCook Field, Dayton, Ohio, dated May 29 was rather interesting:

Have been here since February 10, and expect to stay for a couple more months. Had my discharge already to sign the 1st of March, and then changed my mind as a good position seemed to be pretty scarce and I didn't want to go back to the Public Service.

We are having pretty interesting work here and flying some besides which suits me fine as we get a decent place now. I am in the Sand Load Testing Department and expect to be transferred to the outside design soon. Will have to look after the recommended changes in the new planes. Have been flying D H's and Voughts and Ordnance Scouts since coming here and went on one Liberty Loan trip.

Didn't like the place much at first but am beginning to like it better now though there isn't anything to do.

There are a lot of Tech men (civilians) here in this department, but most of them are '16 and '17 men.

Heard from George Rooney the other day and he is still down at Bridgeport, Conn., but expects to leave by June 25. The boy tells me he has fallen and he is seriously considering taking the fatal step. They are all slowly falling.

Andy, I hear, is quitting the Public Service, though I don't know where he is going—haven't heard from him lately.

Have you heard any dope on any other fellows? Saw Henry Lieb and he was a lieutenant senior grade. Friebus is a second lieutenant out here in the Ordnance Department. He wants me to take him up and give him some stunts. He'll get enough next month if I can get a chance to take him up—to satisfy his curiosity.

What are you doing for excitement these days? Write when you have time and let me hear all the news. About four years ago this time we were all doing considerable worrying as I remember it.

George Rooney, I, called up the other night to confirm the statement in Morse's letter about his leaving Bridgeport. He expects to go to Virginia with the Cooper Company. However he denies emphatically the allegation that he is about to fall.

Jack Dalton, I, president of the class, is now assistant manager of the Philadelphia branch of the Liberty Mutual Insurance Company with offices at 22 South 15th Street, Philadelphia. Under date of June 16 the following letter was received:

I remember my threat to write you a long letter and I wish it were possible to give you a good bit of news. Unfortunately, however, I seem to be in a part of the country where members of the class of 1915 are not.

Pop Wood, I, is a regular attendant of the local Tech Club meetings and is at present, I believe, running the Hog Island Ship Yard. He threatened to be present at our annual Field Day on June 7, but evidently the heat held him up.

Brigham dropped in on me the other day on his way up from down South. He seemed healthy and happy and had considerable to say about boys he had run into in different cities along his route.

I was surprised the other day at the picnic to see Tom Huff who is now located at the League Island Navy Yard in Philadelphia. Tom, in fact, was chief custodian of the punch bowl on Field Day and spent considerable time running his machine between the Athletic Field and the Wenonah Military Academy, the headquarters, taking out full ones and bringing back empties. I trust that you will not become alarmed since there was nothing in it stronger than iced tea flavored with a little lemon, but with the temperature at about one hundred it went pretty well.

Frank Foster came to Philadelphia a few months after I did and is doing his best to prevent accidents in the plants which we insure. Much of his time is spent holding safety meetings and showing our safety movies. He could easily qualify now as a professional.

If you even hear of any of the boys coming to Philadelphia, don't forget to tell them to look me up.

Next year is the fifth anniversary of our graduation. The great world struggle, in which so many of our members were engaged, prevented the customary three-year reunion. We should therefore look forward to our fifth anniversary and its attendant reunion with redoubled enthusiasm. Keep June, 1920, open and whenever you see a '15 man, talk it up.

1916

JAMES M. EVANS, Secretary, 1916 16th Street, N. W., Washington, D. C.

DONALD B. WEBSTER, Assistant Secretary, 18 Clarendon Street, Malden, Mass.

No report received from the secretary.

The following interesting item is from the Boston "Evening Transcript" of May 7, 1919:

The marriage of Miss Marion Hall to Theodore Main, son of Mr. and Mrs. Charles T. Main of Winchester, took place May 6, at the home of the bride's parents, Mr. and Mrs. Frederic Davis Hall, Winter Hill, Somerville. The ceremony was performed by Rev. Howard J. Chidley of the Congregational Church of Winchester, under an arch of bride-roses.

Miss Eleanor Hall, the bride's sister, was the only attendant. Edwin Appleton Barnard of Cambridge, a cousin of the bridegroom, was best man, and the ushers were Charles Reed Main, a brother; John A. Tarbell, a cousin, and Walter I. P. Badger, all of Winchester, and Dr. Fletcher Hatch Colby of Boston, the two latter classmates of the bridegroom at college.

Mr. Main enlisted in the Coast Artillery at the beginning of the war, transferring to the 26th Division. He had just received his discharge after eighteen months' active service in France. He was graduated from Dartmouth in 1914, spending the next year at the Massachusetts Institute of Technology, and is now connected with the Slater Mills at Webster, in which town Mr. and Mrs. Main will make their home.

From "The Tech" of May 14, 1919:

Berthoud C. Boulton, who is a member of the Engineering Staff at McCook Flying Field, has been appointed as a special contributing technical editor of the "Aerial Age." Boulton's work has been in the Research Department, renamed this year the Structures and Aerodynamics Section of the Aeroplane Department, Engineering Division. His work has been on the stress analysis of aeroplanes, both those designed at McCook Field and the very numerous ones submitted for sand test, including the analysis of the wing cell, chassis, fuselage and miscellaneous parts. He designed and proportioned the structural members of the aeroplanes built at the field, and criticized and made recommendations for others that were submitted by manufacturers to the government. One of the most important phases of his work was the development of the present government methods of analysis. He has done a good deal in devising and developing new forms of construction and in adopting new materials to aeroplane work. He has also, been very closely in touch with the Testing Department, and has frequently been called upon to write the more important and difficult reports issued by the Testing Department.

Also from "The Tech":

Announcement is made of the engagement of Lieut. Charles Rogers Lord, of Newton, a graduate of Technology, Class of 1916, now with the American Expeditionary Forces in Italy, to Miss Maria Azzeroni of Turin, Italy. Miss Azzeroni has been active in war relief work in her country and it was this way that the young people first met and began the romance which has brought about their engagement. Lieutenant Lord is the son of Mr. and Mrs. Charles E. Lord of Newton. Following his graduation from the Institute where he was popular in various undergraduate activities, he went to Italy to engage in business as a sales manager for the Allied Machinery Company, with headquarters in Turin. He has remained in Italy ever since and with the entrance of this country into the war activities, he enlisted for service, in which he has since been engaged. His headquarters are now in Rome.

1917

WALTER L. MEDDING, Secretary, 601st Regiment, Beaune, France.

ARTHUR E. KEATING, Assistant Secretary, 893 Seaview Avenue, Bridgeport, Conn.

No report received from the secretary.

The following is reprinted from the Boston "Globe" of April 12, 1919:

"Camion Cartoons" is the latest contribution to the humorous side of the war. It is made up of letters and drawings sent home by Kirkland H. Day of Cambridge, whom Technology men of a few years ago will remember as a student artist who drew striking posters for the Tech Shows.

Mr. Day landed in France, July 4, 1917, with the Tech Unit of the American Mission. Instead of driving ambulances, the unit was assigned to motor trucks, and saw active service, mostly around Soissons, until mustered into the American Army in October. Mr. Day was sent to the Reserve Mallet, a corps of seven hundred trucks, officered and manned by a mixture of French and Americans, attached to no particular army corps, but sent wherever there was trouble. The Mallet Reserve took Frenchmen to fill up the gap when the English were driven back last spring; it took reinforcements to the hard-pressed lines in Flanders; it carried part of the Americans who started the big offensive at Chateau-Thierry. Now it is in the Army of Occupation.

Several letters and drawings from Mr. Day appeared in the "Globe" last year. He doesn't yet know that he is the author and artist of a book.

The cartoons are some of the cleverest that soldier artists have yet produced. They are full of that unconquerable spirit that sees something humorous in being bombed from an airplane and can even see the fun of a camp haircut.

Boston: Marshall Jones Company.

Lieut. Arthur R. Brooks has recently been promoted to the rank of captain in the United States Aviation Corps.

The engagement is announced of Miss Marion Octavea Keene of Hyde Park, Mass., to Calvin Wesson Hawes, of Wakefield, Mass. Hawes is now with the American Expeditionary Forces in France.

The engagement is announced of Miss Edith Rich of Hyde Park, Mass., to, Horatio Nelson Keene, also of Hyde Park.

Winfred W. Smith has returned from abroad. He was married on June 12 to Miss Marguerete Smith of Harrisburg, Pa. He is at present employed in the Research Department of the New Jersey Zinc Company of Pennsylvania.

Alvah E. Moody writes from 17 West Independence Street, Shamohim, Pa:

After returning from France in February, I was stationed at Fort Hancock, N. J., until I resigned my commission in the regular army in April. I am now up here in Pennsylvania with J. H. and C. K. Eagle, silk manufacturers, trying to learn the silk industry. Haven't met any Tech men in these parts, but hope to soon.

The following is an excerpt from a letter of Capt. A. C. Carlton, III, of the Third Infantry, to Professor C. E. Locke:

At present I have quite an agreeable assignment. I am commanding B Company of the 3d and have ten officers, two of whom are doctors, and two hundred fifty men under my jurisdiction. We are scattered over the State of Arizona, divided into seven detachments, and, with two exceptions, guarding mining camps in the State. The company headquarters is at Globe, Arizona, our camp being on the property of the Old Dominion Concern. The other mining towns at which we have detachments are Ray, Lowell, Jerome, and Miami. The two exceptions to which I alluded above are the detachments at the dams of the United States Reclamation Service—at Roosevelt and Granite Reef. The United States Reclamation Service has turned the dams over to an association of water users in Phoenix and the detachments are to be replaced by civilian guards within the near future.

Arizona seems wonderful to me after having been on the Rio Grande for fifteen months and I believe I'd like to settle here permanently in the event of my leaving the service.

Capt. A. C. Carlton, III, married Miss Mabel Caldwell Jones on May 28, in San Antonio, Texas. Present address, Camp Del Rio, Texas.

1918

DAVID M. McFARLAND, Secretary, 626 South High Street, West Chester, Pa.

JULIAN C. HOWE, Assistant Secretary, Box 372, Cohasset, Mass.

In this letter we hope to make up for some of the news that has to date been missing from the REVIEWS. In answer to a questionnaire sent out by the assistant secretary, we have been able to get in touch with some of the men.

J. M. Avery, V, served as second lieutenant, C. W. S., at Edgewood Arsenal, Edgewood, Md., on toxic gas production.

John W. Damon, XV, enlisted June, 1917, Company B, 101st Engineers, 26th Division. After attending the Engineer Candidates' School at Fort St. Minge, he was commissioned and assigned to the 317th Engineers, serving with them on three fronts. He was discharged from the service April 10, 1919. At present he and Bill Foster are with the Packard Motor Co. in New York.

F. H. Hopkins, I, is with the Sandy Point Shipbuilding Corporation at Stockton Springs, Me., as plant engineer.

H. F. Jermain, XIV, was a patrol pilot in the Naval Air Service at Miami, Fla., for six months, being commissioned as ensign. Later he served as bombing pilot at Pensacola until March 7, 1919, when he was put on ordnance work. His present address is 83 Sachem Street, New Haven, Conn.

John H. Chase, I, lieutenant, with the 318th Engineers, is still in France.

C. H. Tavener is with the Curtiss Engineering Corporation. His address is 17 Ash Street, Garden City, L. I.

Earle R. Pickett, VII, is still in France.

Lieut. F. A. Bermingham, IV, is still with the A. E. F. in France.

Jack Hanley, I, R. F. Grohe and Freeman, VI, and E. McE. Manter, II, are with the Factory Mutual Fire Insurance Co. of Boston.

Stuart H. Caldwell, II, received rank of warrant machinist in the Naval Auxiliary Reserve, February 25, and commission as ensign on May 28, 1919. Released from active service June 5, 1919. Present address 14 Ripley Terrace, Newton Center, Mass.

Earl P. Collins, X, was in naval aviation at Technology when peace came. After being at Squantum shipyard for three months he has returned to school for graduate work.

J. W. Kilduff, G. R. Fuller, XIV, and E. Berman were in Pittsburg working on tests for the Ordnance Department. Kilduff is now with Gray & Davis, Inc., working on the heat treatment of metals.

George E. McLaughlin, II, was metallurgist for the United States Cartridge Co., Lowell, Mass. At present he is working in Peabody, Mass.

Max Seltzer enlisted in Cleveland, Ohio, August 5, 1918, as a private in the C. W. S., working on the development of mustard gas at the Cleveland branch of Edgewood Arsenal. Discharged, December 17, 1918.

Waldo S. McGuire was with the Atlas Powder Co. at their ammonium nitrate plants at Reynolds, Pa., and Perryville, Md. At present he is with the United States Color and Chemical Co., Ashland, Mass. Present address, 4 Walcott Road, Revere, Mass.

H. Connett, X, is a captain in the regular army, C. A. C. He is now serving as a courier for the Peace Commission, with headquarters in London.

William P. Ryan, X, enlisted as a private in the C. W. S., and was commissioned second lieutenant in the Development Division. He was stationed at Cleveland, Ohio, Edgewood, Md., and Willoughby, Ohio. At present he is working for Col. F. M. Dorsey in the Engineering Laboratory of the National Lamp Co., and expects to return to Technology in September.

W. M. Bouknight, VI, attended the first O. T. C., Fort Oglethorpe, Ga. Commissioned second lieutenant and assigned to 81st F. A. Promoted to first lieutenant and assigned to 52d Infantry, June 1, 1918, and at present is with them in Germany.

S. H. Huang has been with the Curtiss and is now with the L. W. F. Aircraft Co., New York.

Z. T. Wang has been with the Standard, L. W. F., and is now busy on consulting work of aircraft in New York.

C. H. Chiang has been with the Sturtevant, Sperry & Gallaudet Aircraft Corporation and is now with the Buick Motor Co., Flint, Mich. Present address, 465 William Street, Flint, Mich.

H. R. Underwood is with the United Shoe Machinery Co. as a tool designer. Previous to this he was engaged in the same capacity at the Nordyke & Marmon factory, Indianapolis, Ind., working on the Liberty Motor, being selected for that work by the Army Personnel Board after enlisting in the army. Address, 77 Essex Street, Swampscott, Mass.

Lieut. W. H. Turner, U. S. N. R. F., is inspector of engineering material (aero), U.S.N., Packard Motor Co., Detroit, Mich.

Miss Boudy Lemp was employed as an architectural draftsman by the General Electric Co., in Erie, Pa., resigning her position April 1 to return to Technology to complete work for her degree.

John Blossom Woodward, IV, is a lieutenant of the engineers in the Army of Occupation.

F. C. Spooner, II, spent one year at the Hog Island Shipyard as foreman on hull construction. Later attended the O. T. C. at Louisville, Ky., in Field Artillery and was discharged soon after the signing of the armistice.

E. W. Huckins, XV, was drafted and sent overseas with the 74th C. A. C. while waiting for an expected commission in the Engineers. In November he was sent to an officers' training school and received his commission. At present he is with the 310th Engineers engaged in road building at Fohren, Germany.

J. E. Rowe, II, was a second lieutenant, C. A. C. Address, Habishaw Electric Cable Co., Yonkers, N. Y.

W. A. Felsing is now adjunct professor of chemistry at the University of Texas. He was a captain in the C. W. S. engaged in work for the Offense Gas Division at Edgewood Arsenal. "He managed to serve over a month in the base hospital at Edgewood Arsenal for being too intimate with mustard gas — no wound stripes." Address, 3007 Washington Square, Austin, Texas.

Nelson A. Bond, XI, was commissioned ensign U.S.N.R.F, October 23, 1918. Address, Jefferson, Maine.

F. L. Churchill enlisted as a seaman in the service of the United States Shipping

Board, April 26, 1918, and was discharged January 18, 1919, with the rating of Quartermaster.

G. B. Hutchings, Jr., enlisted in the navy December 4, 1917, and was detailed at Naval Aviation Detachment in charge of Motors Department from May to September. Was sent to Miami, Fla., for flight training for three months and from there to Pensacola. Discharged April 3, 1919. Address, 123 Prospect Street, Stamford, Conn.

E. C. Miao, I, has been working as a draftsman under the supervising engineer of construction Camp Eustis, Va. He plans to return to China in September.

William A. Jones, I, is with the American Smelting and Refining Co., Maurer, N. J. He attended the fourth O. T. C. at Camp Lee and received a commission. Discharged from the service April 12, 1919, after being stationed at several camps in this country.

Roy L. Johnson was in the Air Service, U. S. A., from July, 1917, to December, 1918, and second lieutenant when discharged. Address, Randolph, Vt.

R. P. Miller writes:

I have been Steam Engineering Inspector in U.S.N.R.F., Aviation Section, working on the production and inspection of power plants HS-2 flying boats at L.W.F. Engineering Co., College Point, and was responsible for the perfection of the power plants on the NC boats which flew to the Azores. Was at Rockaway constructing these boats for four months.

A. E. Tuttle is first assistant to the Inspector of Engineering Material, New York, and has handled aviation power plant inspection office since April, 1918.

Bill Wyer, XV, writes from Washington, D. C.:

Have run across some of the class on the street here lately. Lord, XV, is on a construction job at the Naval Proving Grounds below the city. Macheca, of Monthly fame, is in the Torpedo Test Section of the navy and is awaiting his discharge. R. Rowe, I, is the only second lieutenant in the Chief of Engineers' Office where he is writing the history of the war. Lord was found roaming F Street, which bears a close resemblance to Tremont. Mac was of course discovered in a movie while Bobby Rowe is married and his wife lives here, so he has to be good. Bill's address is 1523 22d Street, Apartment 3, Washington, D. C.

Richard Rimbach, I, enlisted in Engineer Reserve, January 24, 1918. Entered active service September 1, 1918. Discharged from Engineer Officers' Training School, Camp Humphreys, Va., November 27, 1918.

Elliott D. Harrington, VI, served fourteen months in the 16th United States Aero Squadron, being commissioned as ensign. He was instructor in gunnery at the Seattle School, transferred to the San Diego Air Station and then on coastal patrol between San Diego and San Francisco.

H. B. Morrill is an ensign in U.S.N.R.F., looking forward to being discharged. He drove an ambulance with the French army at the front from December, 1916, to June, 1917, and has been in Naval Aviation since March, 1918. Address, 184 Amity Street, Flushing, L. I., N. Y.

The following men are reported as still being in France: Charles E. Poirier, 254 Cedar Grove Street, New Bedford, Mass., Lieut. H. W. Long, Corp. Francis G. D'Arcy, James M. Bugbee, Frank R. Moore, Edward S. Carter and Harold B. Butler.

Clarence C. Fuller was Inspection Engineer with the Ordnance Department, and later was transferred to the Field Artillery and took the Officers' Training Course at Camp Taylor. Address, 249 Maple Avenue, Edgewood, Pa.

J. W. Gustaveson is with the Westinghouse Electric and Manufacturing Co., at East Pittsburg, Pa. He entered the fourth O. T. C. at Fortress Monroe and was commissioned, sailing for France with the 50th C. A. C. in October. Landed at Brest

and attended the artillery school there. Later helped the engineers in the construction of the camp, sailing for home January 31. Address, 717 Wallace Avenue, Wilkinsburg, Pa.

O. G. Hugo is now with the Gulf Refining Co., at Port Arthur, Texas. Was a flying cadet at Rich Field, Waco, Texas.

W. E. Imhoff, 176th Aero Squadron, has returned to his home in Port Arthur, Texas, after a year's service overseas.

J. W. Stevens is now with Arthur D. Little, Inc. He served as a private in the C. W. S. in the research division.

Robert W. VanKirk, who was recently engaged in the development division of the C. W. S., stationed at Cleveland, Ohio, has been one of the chemical engineers chosen on the technical staff of Arthur D. Little, Inc.

N. T. Catlin has sailed for Shanghai to take up shipbuilding with the Standard Oil Co.

Lieut. Douglas Buchanan has returned to his home in North Adams after seeing service in France and Italy.

Mr. and Mrs. H. Leslie Platt of Brookline have announced the engagement of their daughter, Eleanor May, to Mr. Sidney Driggs Blaisdell of Providence, R. I. Mr. Blaisdell is now a lieutenant in the United States navy.

We hope that the men from whom we have not heard will write us a line telling us about themselves. Now that times are becoming more settled we should be able to keep track of one another, which task was almost impossible in the past year or so.

It is of interest to know that the final inspection of the Trans-Atlantic NC-4 Liberty motors, before they left the Packard plant, at Detroit, was made by Lieut. William H. Turner.

1919

E. R. SMOLEY, Secretary, Horse Head Inn, Palmerton, Pa.

We will all realize after reading this column and noting the numerous changes in address that our class is still unsettled and in a very restless state. Notwithstanding this fact quite a number of the boys have answered my recent appeal for news and have sent in some interesting matter.

Let's prove that the world's a small place after all, and even though we are way off in "God's Country" somewhere, jot down a few newsy lines and send them in. It is up to you all to co-operate to make this column what it should be.

The following are changes in address of members of our class:

Leon H. A. Weaver, 49 Montague Place, Montclair, N. J.—Edmund C. Adams, care Stone & Webster, 174 Milk Street, Boston, Mass.—F. Stanley Adams, Chicago Pneumatic Tool Company, Chicago, Ill.—Aubrey P. Ames, 19 Main Street, Amherst, Mass.—William H. Banks, Jr., 165 12th Street, Long Island City, N. Y.—Ray H. Bartlett, 523 Linden Street, Camden, N. J.—Leo E. Beaulieu, 221 47th Street, Newport News, Va.—Miss Ethel M. Benedict, 4142 Pimlico Road, Baltimore, Md.—William F. Bennett, New England Power Company, Shellbourne Falls, Mass.—Walter T. Beggar, care The United Fruit Company, Preston, Cuba.—Roderich M. Blood, 20 Orient Avenue, Newton Centre, Mass.—Capt. E. C. Bomer, 132 West Henry Street, Spartanburg, S. C.—L. J. Brown, 121 Dale Street, Roxbury, Mass.—Henry J. Bruno, 101 Coolidge Street, Brookline, Mass.—Capt. David P. Minard,

Aberdeen, So. Dak.—Robert A. Montgomery, 421 Columbia Avenue, Palmerton, Pa.—J. H. Nelson, 53 Moraine Street, Jamaica Plain, Boston, Mass.—Charles J. Parsons, 116 Lyncroft Road, New Rochelle, N. Y.—Ellsworth G. D. Paterson, 976 Main Street, Melrose Highlands, Mass.—Carley H. Pauken, 228 Mt. Hope Place, New York, N. Y.—E. A. Richardson, 34 Gerard Avenue, Hartford, Conn.—Herbert W. Skogstad, 821 S. 3rd Street, LaCrosse, Wis.—Isidor Slotnik, 10 Lawrence Street, Chelsea, Mass.—Kenneth A. Wright, 54 Kenwood Street, Dorchester, Mass.—Lewis E. Hartman, 422 North Duke Street, Lancaster, Pa.—Edmund W. Hill, Harland Road, Norwich, Conn.—Ira P. Jones, 713 18th Avenue, South Nashville, Tenn.—Clyde C. Jones, Lawrence Club, Lawrence Park, Erie, Pa.—A. S. Kelsey, 24 James Avenue, Winthrop, Mass.—Harry A. Kuljian, 600 State Street, New Haven, Conn.—Wilfred O. Langville, 77 Warren Street, Newark, N. J.—G. C. Liu, 3611 Locust Street, Philadelphia, Pa.—Robert, B. MacMullin, 154 West 73d Street, New York, N. Y.—Capt. J. O. Merrill, 707 Goodrich Avenue, St. Paul, Minn.—Gilbert F. Beers is at present working for the Newport News Shipbuilding Company, Newport News, Va.—James H. Becker is situated at 1079 Boylston Street, Boston, Mass.—Leonard M. Bruton, Rodgers Forge, York Road, Baltimore, Md.—J. M. Carter, Jr., 700 Hickory Street, Texarkana, Arkansas.—T. Dehon, Jr., Terry Shipbuilding Corporation, Port Wentworth, Savannah, Ga.—Capt. Ralph C. Flewelling, 399 Broadway, Cambridge, Mass.—Grant E. Gay, 162 Highland Street, Worcester, Mass.—Walter T. Hall, 735 Greenwood Avenue, Glencoe, Ill.—Perry B. Bryne, 1056 Commonwealth Avenue, Allston, Mass.—L. B. Cahill, 2326 Upland Place, Cincinnati, Ohio.—Oswald Cammunn, 532 Beacon Street, Boston, Mass.—Lester Van D. Chandler, Hotel DuPont, Jacksonville, Tenn.—Charles A. Chayne, 1758 Columbia Road, W. W., Washington, D. C.—William J. Hagan, Jr., Athens, Ore.—Lawrence Arnold Gillett, 203 Park Avenue, Princeton, W. Va.—E. A. Freeman, 541 Ward Street, Newton Centre, Mass.—Alexander M. McMorran, Oak Hill, New Brunswick, Canada.—George W. Cann, 66 Kenwood Drive, Lynn, Mass.—J. F. Lavagnino, 593 East California Street, Pasadena, Cal.

If any one wishes the address of a member of our class, write to the Alumni Association or to the secretary.

Irving Kennard was killed February 20, 1919, in a balloon accident at Arcadia, Cal.

From our worthy class president, Don Way:

I saw the REVIEW and your article with its appeal for news. Concerning myself there is none, as I have been plugging along with the Singer people. Thursday, however, my boss and I are going on a little trip to South Bend, Ind., to the wood-working factory out there.

There are a number of the 1919 gang around New York. The evening of the Intercollegiate Swimming Meet up at C. C. N. Y. I ran into a couple of them, Bob Hackett, who is working for the Cooper Company in Newark, which concern makes artificial leather, and Bill Banks who is working in Astoria, L. I., for the New York and Queens Electric Light and Power Co. I have heard that Will Langille is in Newark with the Public Service Electric Co., but have not seen him. Larry Dalton I met at a studio party one night a while ago. He is connected with the engineering department of the New York Edison Co. According to Bob Hackett, Dennison is working for the American Can Co., between here and Bridgeport. He is an efficiency man. About six weeks ago I ran into Fred Barney at the Tech Club. He was an ensign then, doing salvage work on machine tools and power apparatus. He may have returned to the 'Stute by now.

From Antwerp, Belgium, in the American Consular Service "Chuck" Drew writes about his work:

It is in the nature of trade extension, and my job is trying to get contact between Belgium and American merchants.

Chuck says he wants to keep in touch with the boys of '19. Write to him using the following address: C. W. Drew, American Vice Consul, Antwerp, Belgium.

Who should we hear from, but Bal, and he's in gay "Paree!"

Have been in Paris for three days, and through the Tech Bureau have been getting reconnected with the outside world again. I saw your 1919 News Notes in the REVIEW, so I thought I would scratch you a note.

I took my last exam at school September 13, was in the army September 16, and was in the St. Mihiel sector October 16. However, Boche air visitors were our greatest excitement before the armistice.

I met Webb Shippey, '19, at Is-sin-Tille one day and we had a little reunion all of our own.

Bal's address is: Corp. M. C. Balfour, D. C. V.F., Tours, A. P. O. 717.

Aubrey P. Ames is located at 19 Main Street, Amherst, Mass.

The following was abstracted from a Washington, Pa., newspaper:

George L. Baum has been with the American Field Service, ambulance department attached to the French army since his arrival in France in 1917. His chief companion, throughout the strenuous days in and about Verdun, Amiens, Cambrai, Noyon and other places made famous by the German offense last July and August was a Wolf-shepherd dog, known as Bergere loup d'Alsace, being a cross between an Alsatian Shepherd and a Belgian Wolf dog. Both have arrived recently to their home at 288 East Wheeling Street, Washington, Pa.

Let us hear from you, "Locke," particularly about some of the experiences you have had!

News has reached me that Capt. John W. Orcutt has returned from overseas and can be reached at his residence, 919 Blue Hill Avenue, Dorchester, Mass.

Radford W. Rigsby has returned from the great white way to his home at 44 Langdon Street, Cambridge, Mass., contrary to the line of our recent songs, "How are you going to keep them out of Broadway?" etc.

James Holt has changed his address to Box 295, South Swansea, Mass., R. F. D.

Charles W. Hyde may be reached, care C. A. Chandler, 497 Boylston Street, Brookline, Mass.—From Washington, D. C., care the United States Coast and Geodetic Survey, Freeman H. Horton has moved to 322 South 2d Street, Springfield, Ill.—Ellwood Harmon Aldrich is now located at 844 North Church Street, Rockport, Ill.

☞ Chester Stewart writes from Wilmington, Del., 600 Rodney Street, some interesting news:

Blake Darling was in town for three or four days and we had a good time. Blake is in the sales department for a fibre concern and is traveling around the East.

Al Richards has been transferred to our Brooklyn Plant (National Aniline Co.) and will work on acid green.

Bob Bolan is working on aniline and I'm working on cumidine, which is used for making a red foodstuffs' dye.

Harry Peach is now with du Pont's and with him are O'Donnell, Welster, Sherman and Bond from our class.

Say Gene, can you give me any dope on "Technique"? I have a couple of stubs which I'd like to redeem if they're putting out a book this year.

I imagine there are several others in our class who are also wondering whether we are going to obtain the copies of "Technique '20," which we signed up for. I have been fortunate to obtain a copy from a Tech man in town and have gone through it. The book is a very good one to possess for members of the class of 1920 as well as of our class. But let's get our books!

The following letter was received from Henry M. Blank, treasurer of Institute Committee:

At a recent meeting of the Institute Committee it was voted to give \$100 to the class of 1919 toward a permanent fund. It has always been customary for a class on graduating to have such a fund of \$200, but the Institute Committee had only \$194.83 on January 1, 1919. The Institute Committee also has paid \$37.45 to the Alumni Association for your class.

Inasmuch as the money to the Institute Committee comes from the Student Tax, the \$100 your class is receiving is really more than it has put into this tax.

From "The Tech" April 23:

The many friends of Lieut. Paul D. Peltier were much shocked to hear of his sudden death in a railroad accident at Eski-shehr, Asia Minor. Lieutenant Peltier came to the Institute in 1915, taking the biology course. While here he was in the Tech Show cast in 1915, 1916 and 1917, was a member of the Masque, and of the 1916-17 swimming team. When the United States entered the war he volunteered and became attached to the Sanitary Corps. He served in several places in this country and in February was selected as one of the bacteriologists to accompany the expedition for relief in the Near East which left New York on the "Leviathan," February 16.

A mysteriously signed letter arrived from the Essex Aniline Works giving the following addresses:

"Dutch" Seifert, V, analytical chemist, Leon Snow, X, and Dick Cashin, V, operating chemists for the above-mentioned firm.

George Fleming pleasantly surprised the boys in Palmerton, Pa., by a permanent visit. He has joined the group of Class '19 here, helping to produce zinc, zinc oxide and other zinc products, and is now located in the testing department of the New Jersey Zinc Company, in which department are also employed G. C. McCarten, E. J. Flynn and R. Burbank.

These '19 men deserve credit for their work in Palmerton, Pa., along sociological lines. They were instigators in the organization of a Palmerton Boys' Club, which club has mapped out a program of activities in town along athletic lines, such as tennis tournaments, baseball games, track meets, swimming meets, and later on basketball, football; along social lines, dances, etc.; and educational work, debating, dramatics, forestry, photography, etc. The sociological work here also includes work such as English instruction to foreigners, placing the children of town, chiefly of foreign parentage, in the atmosphere for proper development. For this purpose there is an institution called the Neighborhood House, similar to a Young Men's Christian Association, which has a splendid gymnasium and other facilities.

Recent '19 Class visitors in the Paris Bureau:

F. G. Elwell, R. W. Scott, L. H. A. Weaver, K. M. Cunningham, R. H. Gilbert, H. S. Derby, F. A. Bermingham, A. F. Kaupé, H. D. Corthell.

We note that Oswald Cammann is assistant treasurer of "The Tech." Steer them straight, "Ossy."

W. MacFarland of Wollaston, Mass., recently announced his engagement to Regina Pearl Saville of Hampton, Nova Scotia.

In the April 29 issue of the Pittsburgh "Press and Times" appeared the following news of S. K. Lau, VI:

Chinese student to play villain in Asiatic Drama of Home Life in Schenley Theatre of Pittsburgh. Mr. Lau is one of the principals in "Shao, Jeh, Yee," a Chinese play to be presented by the Chinese students' club of Pittsburgh at Schenley Theatre tomorrow night. The name of the play in English is "Faithfulness, Devotion, Sacrifice." It is a story of ideal Chinese family life and was written by five members of the club, dramatized by Owen White of the dramatic school of Carnegie Tech and coached by Theodore Viehman of the same school. Six principals enact the leading roles. Numerous specialties to be introduced during the performance.

which is in English, include a game of shuttlecock, the Chinese national game, a number of lantern slides and a Chinese magician.

News has arrived of the death of Charles E. Westland, I, of 4 Aldrich Street, Somerville, Mass., on April 12, 1919. He was born May 11, 1898, prepared at Somerville High School and received his S.B. at Technology in September, 1918. While at school he was active in the Civil Engineering Society, and in Track.

H. L. Cassidy is at present a student in the University at Toulouse, and H. F. Marshall at Portiers.

ANSWER THE CALL FOR NEWS!